

# FINANCIAL TIMES

EUROPE'S BUSINESS NEWSPAPER

No. 29,821

Monday January 6 1986

D 8523 B

Stock markets:  
Europe in  
spotlight, Page 12

Algeria	20	Indonesia	2500	Peru	90
Argentina	1500	Japan	1500	S. Arabia	6.00
Australia	10.45	Kenya	100	Singapore	33 4.10
Canada	101.00	Malaysia	10.45	Spain	16.20
Denmark	103.70	Mexico	10.45	Switzerland	10.45
France	103.70	Norway	10.45	U.A.E.	10.45
Germany	103.70	Philippines	10.45	U.S.A.	10.45
Greece	103.70	Portugal	10.45		
Hong Kong	103.70	S. Africa	10.45		
India	103.70	Thailand	10.45		
Italy	103.70	Turkey	10.45		
Japan	103.70	U.A.E.	10.45		
U.S.A.	103.70	U.S.A.	10.45		

## World news Business summary

### Hart drops Icahn out of Senate contest

Senator Gary Hart, a candidate for the Democratic nomination in 1984, said at the weekend that he would not seek re-election to the US Senate next year, but stepped short of announcing an outright bid for the presidential nomination in 1988.

Mr Hart, whose campaign for "new ideas" brought him close to beating former Vice President Walter Mondale for the Democratic nomination two years ago, is widely considered to be the front runner.

Page 14

### Icahn becomes chairman of TWA

CARL ICAHN, the Wall Street investor, has become chairman of TWA, struggling US airline, after resolving a last minute stumbling block with the air carrier's pilots and winning management approval for a revised and scaled-down no-cash merger deal. Page 16

### Pakistan rallies

Pakistan's largest opposition party the PPP, staged the first open political rallies in the country since eight and a half years of martial law ended last week.

### Spain Nato warning

Spanish Deputy Prime Minister Alfonso Guerra said the Government might dissolve parliament and call early elections if it lost a referendum on continued membership in Nato.

### Punjab killings

Two people were killed and at least seven injured over the weekend as Sikh extremists stepped up attacks in India's Punjab state.

### French air strike

French air traffic controllers have called a one-day strike, but minimum services will be provided for both national and international flights, according to airport authorities.

### W. German arrests

Police said that 134 anti-nuclear demonstrators were arrested in Amberg, northern Bavaria, after damaging the facade of a jail holding two protesters who allegedly planted with officers at a nuclear plant construction site.

### Death toll rises

The death toll in a bitter spell of cold weather sweeping down from the Himalayan mountains across northern India and neighbouring Bangladesh in the past 12 days has risen to at least 147.

### Volcano rumbles on

Colombia's Nevado del Ruiz volcano rumbled loudly and ejected ash, raising fears of an imminent eruption similar to the one that killed 23,000 people in November. Page 3

### Gulf flare-up

Iraq said its aircraft attacked Iran's main oil export terminal at Kharg Island and hit a large naval target in the Gulf.

### Avalanche kills two

Two Swedish skiers died in hospital after being caught in an avalanche in the mountains near Verbier.

### Soviet sackings

A large number of party officials in the Soviet republic of Kirgizia have been sacked, and seriously reprimanded for allowing a drop in economic performance and moral standards, according to the government newspaper Izvestia.

### Isherwood dies

British-born author Christopher Isherwood, whose book "Goodbye to Berlin" was made into the film and stage musical "Cabaret", has died of cancer at the age of 81. Obituary, Page 11

### FT travel writer dies

ARTHUR Sandles, the Financial Times writer on travel and leisure, died suddenly yesterday while skiing in Switzerland. Mr Sandles, who joined the FT in 1961, was 50.

"He will be remembered as a most conscientious, objective, knowledgeable and witty travel writer who was much liked and respected by his associates," said Mr Erich Reich, managing director, Thomas Cook Holidays, yesterday. "He will be a great loss to those who care for the business of leisure and travel."

Mr Sandles was Travel Writer of the Year in 1984.

Mr Sandles will be sadly missed by Christine and his three daughters. Mr Geoffrey Owen, editor of the Financial Times, said: "Arthur Sandles was one of the FT's most able writers who made an outstanding contribution to the development of the paper over the past two decades. He had many friends here and he will be greatly missed." Obituary, Page 6.

## French press magnate defies newspaper ownership law

MR ROBERT HERSANT, the French right-wing press magnate, has deliberately defied President Francois Mitterrand's Socialist Administration by taking over a leading provincial daily in violation of a recent law on newspaper ownership, writes David Housego in Paris.

Mr Hersant announced his move at the weekend in the confident expectation that a right-wing government would come to power in the wake of parliamentary elections in March and repeal the controversial legislation. Mr Hersant is himself standing for election to the National Assembly as are some 15 of his staff and editorial writers.

The new law, aimed at limiting the number of titles that can be owned by any one group, was specifically intended by the Socialists to halt further expansion by Mr Hersant, whose flagship paper is Le Figaro. His group already accounts for 38 per cent of sales by French national daily papers and 18.2 per cent of provincial sales.

The acquisition of the Lyons daily Le Progrès, will give him a virtual monopoly of the local press in and around France's second largest city. In addition to his press interests, Mr Hersant is also the leading candidate to take over the state-owned television channel Antenne 2 which the right is committed to privatising after the elections.

Mr Hersant underlined his defiance of the Government, by not even bothering to consult the watchdog commission set up under the new law to maintain pluralism in the press.

Mr Henri Callavet, president of the commission, described the takeover as "illegal" and said that Mr Hersant would face prosecution before the courts. But it is doubtful whether either the commission or the Government have the power to impose on Mr Hersant the heavy fines - and even in certain circumstances the prison sentence - provided for by the law.

In the same spirit, his son, Mr Philippe Hersant, gained control last week of another regional newspaper, the Union de Reims, by obtaining a six-month management contract. The press commission had earlier ruled that its purchase by the Hersant group would be illegal.

With some 21 daily papers now to his name and some 20 magazines, Mr Hersant is by far France's most successful newspaper manager. He flaunted that on Friday by announcing that in future Le Figaro would carry a strapline on its masthead describing it as the "first national daily." With an estimated 25 per cent increase in circulation in recent months after introducing a financial "bingo" game, it now sells 480,000 copies a day - thus overhauling Le Monde.

This new acquisition is thus bound to raise fresh questions in France about the concentration of newspaper ownership and about the economic weakness of many French papers, which has left them vulnerable to Mr Hersant's pressures.

It was partly in the hope of establishing a counterweight to Mr Hersant's influence that President Mitterrand recently announced the setting up of a fifth French channel, with shareholders including Mr Silvio Berlusconi, the Italian television magnate.

But there were even signs of disquiet on the right over the week-

end at the pace of Mr Hersant's expansion. The strongly right-wing paper Le Quotidien described Mr Hersant as a "megalomaniac" in a front-page editorial and said his "exorbitant influence" must be opposed.

A politician also nervous of Mr Hersant's advance is Mr Raymond Barre, the former Prime Minister, whose political base is Lyons. Mr Barre has made little secret of his wish to preserve pluralism in the press in his region.

Mr Hersant's purchase of the Lyons Progrès with a circulation of 287,000 and substantial losses, is a setback to the Government's plan to acquire the Lyons Progrès in 1983 of its main regional rival Le Dauphiné Libéré. Along with Le Progrès, Mr Hersant has obtained a 40 per cent stake in Le Journal de Dimanche, France's only national Sunday paper, and other regional titles that belonged to the same group.

The press law limits any group to a ceiling of 10 per cent of the circulation of the national and the daily press. But the group has interests in both, a ruling by the Constitutional Council that the law could not be applied retroactively prevented it from being used to strip Mr Hersant of his existing titles. None the less, the Socialists hoped it would halt him in any further expansion.

Mr Georges Filloud, the Minister of Communication, who piloted the law through the National Assembly, said over the weekend that Mr Hersant's purchase of Le Progrès was "invalid."

Socialist party officials, trade unionists, journalists associations, and most centre to left-wing papers also condemned it.

## Westland expected to unveil improved offer by Sikorsky

WESTLAND, the troubled British helicopter company, is expected to announce an improved offer from Sikorsky/Fiat today which the board considers is better than the rival rescue plan put forward by the five-strong European aerospace consortium.

Last night, the European consortium, advised by Lloyds Merchant Bank, attempted to block approval of the new offer by the Westland board by requesting an immediate meeting to discuss their proposal.

One option being canvassed within the consortium and the UK Ministry of Defence, which strongly favours the European plan, is to go to the High Court to argue for an adjournment of the extraordinary general meeting of shareholders on January 14 to vote on the Sikorsky/Fiat offer.

After four days of tense negotiations in London, Sikorsky/Fiat agreed in principle yesterday to increase the amount of guaranteed subcontracting work to Westland and to sweeten the financial terms for the company's shareholders and banks under a £72m (£102m) reconstruction plan.

The new package, to be approved by the Westland board and sent to shareholders today, is expected to include an offer of about 2m guaranteed man-hours of work, topping the European offer of 1.8m man-hours. This represents almost double the earlier offer of 1m man-hours by the American and Italian partners, but the work will be spread over a period longer than the three years originally agreed.

Matching or improving the financial terms offered under the £73m European rescue plan has, by all accounts, proved more taxing.

Under the revised offer, Sikorsky/Fiat is expected to relinquish their original option to subscribe to new shares which would have allowed them to control up to 28.8 per cent of the company. The new shares are now expected to be offered to existing shareholders, reducing the Sikorsky/Fiat stake to 28.8 per cent, or possibly less on a fully diluted basis.

Westland's advisers, Lazard Brothers, are understood to have argued that there was a risk of financial institutions blocking the reconstruction plan at the shareholders' meeting on January 14 unless their stakes in the recapitalised company was raised.

A second obstacle in the negotiations has centred on Westland's bankers, National Westminster and Barclays.

Under the European offer, drawn up by Lloyds Merchant Bank, the two banks were asked to convert £23m of current debt into preferred capital compared with £28m under the original Sikorsky/Fiat proposal.

The banks are understood to have pressed for similar favourable terms. However, Sikorsky/Fiat argued that this meant their putting up an extra £5m to relieve the banks' burden. These differences were apparently resolved over the weekend but only after prolonged debate.

Sir John Cuckney, Westland's chairman, is expected to formally recommend the revised offer from Sikorsky/Fiat today and to press ahead with plans to hold the extraordinary general meeting on January 14. The board has taken legal advice and been assured it can put the revised proposal to shareholders, even at such short notice.

Mr David Horne, managing director of Lloyds Merchant Bank, said yesterday: "I believe that the meeting should be adjourned in the interests of equity so that both offers can be considered properly by the shareholders."

Mr Horne spent the weekend in Paris and Munich holding talks with senior executives of Adresspale and Messerschmitt-Bölkow-Blohm respectively. He said he could not rule out a further revised offer from the European consortium, which also contains British Aerospace, GEC and Agusta of Italy.

Mr Horne asked the French and German aerospace manufacturers to press their governments to spell out publicly the danger of Westland shutting itself out of future European collaborative ventures if it pursues the Sikorsky/Fiat plan.

Peter Kendall, Political Editor, said: "Mr Michael Heseltine, the UK Defence Secretary, was last night in an exposed political position as

## Inquiry into US N-plant leak opens

THE US Nuclear Regulatory Commission (NRC) began an investigation yesterday into an accident at an Oklahoma uranium processing plant, where one worker was killed and more than 100 others were injured.

The accident occurred when a tank filled with radioactive gas ruptured, sending a highly toxic cloud of slightly radioactive uranium hexafluoride gas into the atmosphere near the Sequoyia Fuel Corporation plant in Webbers Falls, Oklahoma, on Saturday.

The plant is owned by a subsidiary of the Oklahoma City-based Kerr-McGee Corporation, the company whose safety practices were at issue in the controversial Karen Silkwood case. Miss Silkwood, the subject of the film Silkwood, died mysteriously in a car accident when she was pursuing allegations against the company.

Officials said that the gas cloud dissipated in winds of more than 20 miles per hour, two hours after the gas tank ruptured. The accident occurred just three days before the NRC was scheduled to hear proposals for an expansion of the plant's activities.

According to plant officials, the rupture came as the container was being heated. The plant was evacuated after the accident but by late Saturday afternoon operations had resumed.

Dozens of workers and nearby residents were brought into area hospitals for "apparent hydrofluoric acid exposure" which causes irrita-

## US and Israel warned over threats to Libya

THE SOVIET UNION and Arab countries have rallied to the defence of Libya in the face of US and Israeli threats of military action against Col Muammar Gaddafi's regime.

The Soviet Communist Party newspaper Pravda yesterday accused the US of preparing for armed intervention. It warned that the US and Israel had no right to adopt the role of judges in assessing blame for the terrorist attacks at Rome and Vienna airports in which 19 people were killed.

The US and Israel have said the attacks were carried out by the extremist Palestinian faction headed by Abu Nidal which is supported by Libya. Pravda said yesterday that repeated Libya denials of involvement had been totally ignored by Washington.

The Arab League, which groups 20 Arab countries and the Palestine Liberation Organisation, said yesterday after meeting in Tunis that it had taken "appropriate measures" in response to "threats by the US against Libya."

On Saturday the Arab League's permanent representatives described the US threat as a challenge to the entire Arab world.

Syria has been the most outspoken, pledging military support for Libya "in order to confront any aggression." It contrasted the US threats against Libya with its silence on "Israel's organised terrorist and racial practices against the Arab population of the occupied territories."

The annual meeting of the 45

## Tin Council delegates to study latest market rescue plans

DELEGATES to the International Tin Council (ITC) return from their Christmas break this week to consider fresh proposals for rescuing the tin market.

The package, put forward by a leading broker and banker involved in the tin crisis since the 22-nation ITC last met on December 20, has been greeted with interest by ITC producing members and by the UK Government, which has been pressing for a settlement. But there has been little overt sign of a change of heart among key consuming countries such as France, West Germany and the Netherlands, which have so far blocked efforts to open negotiations with the Tin Council's creditor banks and brokers.

"To say that things are moving at all is putting a pretty strong face on the thing," said one key delegate last week.

ITC delegation leaders will meet tomorrow to assess the situation, ahead of a full meeting of the Tin Council next week. The delegation leaders are expected to set up a meeting with the proponents of the latest rescue plan, Mr Peter Graham, vice-chairman of Standard Chartered Bank, and Mr Ralph Kestelbaum, joint managing director of Gerald Metals.

The plan, put forward by the two men in their personal capacity without the prior backing of other banks and brokers, envisages setting up a new company to take over the 85,000 tonnes of tin stocks which the ITC is due to hold by the end of this month and selling them off gradually over the next three years.

The company would be owned by bankers and brokers, and would absorb the ITC's member governments' obligations to the Council in return for a commitment to meet its losses, which might total up to £200m (£284m).

Advocates of the plan argue that it has several advantages: it would put a cap on the amount governments would have to put up to solve the tin crisis; it would pave the way for an orderly winding down of the ITC stockpile; and it would put the banks and brokers in a much stronger position in that they would be dealing with a fully-capitalised company rather than a somewhat hazy-defined group of sovereign governments.

"This is the best offer around since the crisis began," said one delegate.

However it still has to pass the hurdle of opposition by some ITC members to any admission of liability for the Tin Council's debts.

There are suggestions among brokers of the London Metal Exchange - where tin trading has been suspended since the ITC ran out of money to support the price more than 10 weeks ago - that the extent of governmental contributions would be subject to negotiation - in line with the desire of some ITC members that bankers and brokers, who are owed hundreds of millions of pounds, should share its losses.

But bankers still seem adamantly opposed to this idea, on the grounds that cancelling debts for which the ITC contracted as an organisation of 22 sovereign governments would set an unacceptable precedent.

Mr Graham said last week that he had received some positive feedback on his plan from producers and from some smaller consumers, but there was no word from larger consuming countries.

Meanwhile, time is running out for the LME, the world's leading metals market. The exchange authorities have delayed a decision on whether to reopen tin trading until January 13. Mr Graham said that he hoped they might keep the market shut for a few days longer if there was a chance that negotiations with the ITC might get under way.

## US and Israel warned over threats to Libya

THE SOVIET UNION and Arab countries have rallied to the defence of Libya in the face of US and Israeli threats of military action against Col Muammar Gaddafi's regime.

The Soviet Communist Party newspaper Pravda yesterday accused the US of preparing for armed intervention. It warned that the US and Israel had no right to adopt the role of judges in assessing blame for the terrorist attacks at Rome and Vienna airports in which 19 people were killed.

The US and Israel have said the attacks were carried out by the extremist Palestinian faction headed by Abu Nidal which is supported by Libya. Pravda said yesterday that repeated Libya denials of involvement had been totally ignored by Washington.

The Arab League, which groups 20 Arab countries and the Palestine Liberation Organisation, said yesterday after meeting in Tunis that it had taken "appropriate measures" in response to "threats by the US against Libya."

On Saturday the Arab League's permanent representatives described the US threat as a challenge to the entire Arab world.

Syria has been the most outspoken, pledging military support for Libya "in order to confront any aggression." It contrasted the US threats against Libya with its silence on "Israel's organised terrorist and racial practices against the Arab population of the occupied territories."

The annual meeting of the 45

## Contents

International	2, 3	Eurobonds	15, 16
Companies	15, 16	Financial Futures	23
World Trade	4	Int'l Capital Markets	15, 17
Britain	5, 6	Letters	13
Companies	18	Lex	13
		Leopard	13
		Management	10
		Men and Matters	12
		Money Markets	23
		Stock markets - Bourse	28
Appointments	21	Wall St	28, 27
Arts - Reviews	11	London	24, 25
World Guide	11	Technology	9
Crossword	22	Unit Trusts	21-23
Currencies	12	Weather	14
Editorial comment	12		

## US/Mexico: relations improve

US/Mexico: relations improve 14

Technology: isotope enrichment 9

Management: takeovers become each-way bet 10

World stock markets: Europe in spotlight 12

## Britain: the number of homeless grows

Britain: the number of homeless grows 13

Lombard: a job insurance guarantee fund 13

Lex: Westland helicopters; Wellcome 14

Survey: Communications in business Section III



## ANZ & GRINDLAYS OPERATE A NETWORK SPANNING 45 COUNTRIES

The Australia & New Zealand Banking Group with its acquisition of the UK based Grindlays Bank, has established a formidable presence on the international banking scene with Group assets of over US\$30 billion. An asset base that spans the globe with over 1600 branches and offices in 45 countries.

This places the ANZ Group in the ideal position to assist corporations with their particular domestic and international finance requirements. The new Group's strength is down from its business base in most of the major regions of the globe and the growing diversity of its wide range of services.

ANZ and Grindlays. A force spanning the globe.

**Banking Group. The new force in International Banking.**

ANZ Banking Group Limited  
55 Gracechurch Street, London EC3V 0BN  
Tel: 01-390 3100, Telex: 881274 ANZBANK G

Grindlays Bank plc  
Mincing Lane, Montagu House, London SE1 9DH  
Tel: 01-626 0545, Telex: 883493 GRINDLY G

BRANCHES AND OFFICES IN - AUSTRALIA • AUSTRIA • BANAHAM • BAHRAIN • BANGLADESH • BRAZIL • CANADA • CAYMAN ISLANDS • CHINA • HONG KONG • INDIA • INDONESIA • JAPAN • JORDAN • KENYA • REPUBLIC OF KOREA • MALAYSIA • MEXICO • MONACO • NEW ZEALAND • NIGERIA • OMAN • PAKISTAN • PAPUA NEW GUINEA • QATAR • SCOTLAND • SINGAPORE • SLOVAKIA • SRI LANKA • SWITZERLAND • TAIWAN • UGANDA • UNITED ARAB EMIRATES • UNITED STATES OF AMERICA • VANUATU • ZAMBIA • ZIMBABWE



OVERSEAS NEWS

Pakistan opposition tests Zia

By Mohammad Afzal in Islamabad
PAKISTAN'S main opposition party gave its first show of strength for more than eight-and-a-half years on Sunday, with rallies in dozens of Pakistani cities.

Landmine blast kills two in Transvaal

BY ANTHONY ROBINSON IN CAPE TOWN

A WHITE farmer and his 32-year-old daughter-in-law were killed and two other passengers in their truck injured over the weekend when their vehicle detonated a mine planted on an isolated north-west Transvaal farm only three kilometres from the Botswana border.

Crocker to reopen talks with Angola

RENEWED efforts to bring about the independence of Namibia are due to get under way this week when Dr Chester Crocker, the US Assistant Secretary of State for African Affairs, visits Lusaka for talks with senior Angolan officials.

Angolan officials in the Zambian capital, Lusaka, last November. Efforts to bring about Namibia's independence have been held up by South Africa's insistence, backed by Washington, that any withdrawal of Pretoria's troops from Namibia should be matched by the pull-out of an estimated 25,000 Cuban troops in Angola.

Economic ties top agenda for visit of Nigerian minister

BY MICHAEL HOLMAN

PROFESSOR Bolaaji Akinyemi, Nigeria's Minister for External Affairs, is due in London today for the first official visit by a Nigerian minister since the August coup brought General Ibrahim Babangida to power.

NOTICE OF REDEMPTION To the Holders of General Mills, Inc.

U.S. \$100,000,000 12% Notes, Series A, due December 19, 1991
NOTICE IS HEREBY GIVEN to the holders of the outstanding 12% Notes, Series A, due December 19, 1991 (the "Notes") of General Mills, Inc. (the "Company") that, pursuant to the provisions of Section 7(a) of the Series A Fiscal and Paying Agency Agreement dated as of December 19, 1984 between the Company and Morgan Guaranty Trust Company of New York (the "Fiscal Agent") and Paragraph 4(a) of the Terms and Conditions of the Notes, the Company has elected to redeem on February 5, 1986 U.S. \$15,700,000 principal amount of the Notes (the "Redemption Notes") at a redemption price equal to 101% of the principal amount thereof, together with accrued interest to said date, in the amount of U.S. \$16.67 for each U.S. \$5,000 principal amount and U.S. \$13.33 for each U.S. \$10,000 principal amount as follows:

Table with 2 columns: Outstanding Notes of \$5,000 Each Bearing the Following Distinctive Numbers and Outstanding Notes of \$10,000 Each Bearing the Following Distinctive Numbers. Lists serial numbers for various note denominations.

Table with 2 columns: Outstanding Notes of \$5,000 Each Bearing the Following Distinctive Numbers and Outstanding Notes of \$10,000 Each Bearing the Following Distinctive Numbers. Lists serial numbers for various note denominations.

Payment will be made, subject to applicable laws and regulations, in U.S. dollars on and after February 5, 1986 upon presentation and surrender of the Redemption Notes with coupons attached, falling within the period of the process proceeds if process not recognized as exempt recipients fail to provide a Paying Agent with an executed IRS Form W-9 in the case of non-U.S. persons or an executed IRS Form W-9 in the case of U.S. persons.

US high-tech company seeks 'fifth-generation' computer

BY DAVID FISHLICK, SCIENCE EDITOR

AT LEAST one high-technology start-up company has no need to hustle for money. Microelectronics and Computer Technology Corporation (MCC), of Austin, Texas, has a guaranteed income of \$50m for the current year, rising to \$55m next year, for research at the leading edge of electronics.

Norris, its founder, expected when he began to alert US industry to the magnitude of the threat he believed was posed by ICOT in 1982. "We are comfortable now with the number of companies we are not recruiting," says Mr Bill Stotenburg, responsible for MCC's relationship with government.

Not until the Japanese began to demonstrate how effective pre-competitive research collaboration could be, in VLSI in the late-1970s, did the climate change to make it acceptable in the US. The four programmes chosen as holding the greatest economic promise for shareholders are: Computer-aided design for VLSI. This is an attempt to create a system for the design and testing of integrated circuits having upwards of 1m devices a chip. The goal is to automate design to a degree where a team of professionals could create a new 1m-device chip in less than a month. It is an eight-year project.

Iranians help fight blaze on Maltese tanker

IRANIAN tugboats yesterday fought to extinguish the flames on the Maltese tanker Komarc as it was hit by an Iranian missile south of the Kharg Island oil terminal, Gulf shipping officials reports, AP reports from Bahrain.

It was the second tanker to be attacked by Iraq in the vicinity of Kharg since January 1, without an accompanying Iraqi announcement of the raid, marine salvage executives in the region noted. The 62,000-ton tanker was attacked by Iraqi warplanes as it was sailing southward after taking on a full load of Iranian crude oil from the terminal. The London-based Lloyd's shipping intelligence unit reported that the attack took place 20 miles south of Kharg. The crew abandoned the vessel but the captain, two seamen and the radio operator remained aboard to fight the flames.

Advertisement for The Washington Post Company Eurocommercial Paper Programme. Features a large '\$150,000,000' figure and the company name. Includes contact information for First Chicago Limited, Issuing and Paying Agent.



OVERSEAS NEWS

Marcos claims rebels use arms to back Aquino

PRESIDENT FERDINAND Marcos of the Philippines claimed yesterday that communist rebels were using arms to campaign for Mrs Corason Aquino, the opposition presidential candidate, and were threatening to wipe out rural villages if residents vote for him in the elections on February 7. AP reports from Taytay.

Fears grow that Colombian volcano may erupt again

COLOMBIA'S Nevado del Ruiz volcano rumbled loudly and spat ash yesterday, raising fears of an imminent eruption similar to the one that killed 23,000 people in November, Renter reports from Bogota.

US films attacked for anti-Soviet attitudes

SOVIET officials have complained that American films portrayed individual Soviet citizens as "perfidious, insensitive and aggressive," creating an atmosphere of paranoia about the Soviet Union in the US.

Portugal champion braced for the challenge

PORTUGAL'S first EEC Commissioner, Mr Antonio Cardoso e Cunha, is used to challenge, but he may find that the distance between cattle ranching in Angola and fishing negotiations in Brussels is as great in spirit as in miles.

Spain dispatches a familiar face



Spanish and Portuguese Commissioners receive portfolios at the first meeting of the Commission since Spain and Portugal joined the Community. (L to R) Mr Matutes, Mr Cardoso e Cunha, Commission President Jacques Delors and Mr Marin.

"Un buen chico"—a good lad—is how Mr Manuel Marin, Spain's vice-president on the European Commission, has come to be regarded even by Spanish businessmen, and for a socialist it is quite a compliment.

Tan boosts Malaysian Chinese party role

MR TAN KOON SWAN, the beleaguered entrepreneur and politician, has consolidated his position as leader of the Malaysian Chinese Association (MCA) the largest Chinese political party, following a Cabinet reshuffle over the weekend.

Phillips & Drew (Trading) Ltd

Phillips & Drew are pleased to announce that they are now able to offer a market making service in the following stocks through their International Dealer operation:

- AUSTRALIA
\*ANZ Banking Corp
Ashton Mining
\*BHP
Central Norseman
\*CRA
\*CSR
GMK
\*MIMS
\*National Aust Bank
News Corp
\*Pan Continental
\*Peko Wallsend
\*Santos
\*Western Mining
\*Westpac

Contact:
John Turner
John Collier
01-726 6932

- GERMANY
\*BASF
\*Bayer
\*BMW
\*Commerzbank
\*Deutsche Bank
\*Dresdner Bank
\*Daimler Benz
\*Hoechst
\*Mannesmann
\*Siemens
\*Veba
\*Volkswagen

Contact:
Colin Spicer
Laurence Gant
01-628 9336/9337

- HOLLAND
Aegon
\*AKZO
Gist Brocades
Heineken
\*KLM
Oce-Van Der Grinten
\*Phillips
Robeco
\*Royal Dutch
\*Unilever
VNU

Contact:
Paul Deslandes
01-588 5381/5372

- HONG KONG
\*Cheung Kong
\*China Light & Power
\*Hong Kong Electric
\*Hong Kong Land
\*Hong Kong & Shanghai Bank
\*Hong Kong Wharf
\*Hutchison Whampoa
\*Jardine Matheson
\*Swire Pacific

Contact:
John Turner
John Collier
01-726 6932

- SWITZERLAND
Adia SA
Brown Boverie CIE
\*Ciba Geigy
\*Credit Suisse
Hoffman La Roche
Jacobs Suchard
\*Nestlé
Sandoz
\*Swiss Bank Corporation
Swiss Reinsurance
\*Swissair
\*Union Bank of Switzerland
Winterthur
Zurich Insurance

Contact:
Paul Deslandes
Colin Spicer
01-588 5381/5372

\*Now on the SEAQ system, our mnemonic is PDT.

Alternative Lines: STX 4094/5117, 01-628 4444 x 2337/2438/2450

Phillips & Drew (Trading) Ltd is a wholly owned subsidiary of Phillips & Drew



WORLD TRADE NEWS

VW seeks share in Soviet project

WEST GERMANY, which is vying with other Western nations for increased business in the Soviet Union, is hoping to play an important role in a big Soviet motor vehicle project.

VW, which is 20 per cent owned by the Federal Government and 20 per cent by the state of Lower Saxony, does not consider a decision on contract to be imminent.

Other companies interested in aspects of the Soviet motor vehicle project are Saabgitter, the federal government-owned steel and manufacturing group, and Liebherr, the construction equipment and engineering concern which has long-standing business links with the Russians.

Hungary is offering tax benefits, cheap labour and some customs facilities to attract foreign know-how and capital in joint ventures with Hungarian partners, AP reports from Budapest.

French in talks on helicopters for Hungary

AEROSPATIALE, the French state aerospace group, is in advanced negotiations with Hungary to sell the East European country up to 75 Eurocopter helicopters over 10 years in a deal worth at least Fr 500m (\$29m).

Foreign companies in protest at Pakistan countertrade plan

BY MOHAMED AFTAB IN ISLAMABAD

PAKISTAN'S plan to commission three foreign companies to undertake some \$1bn (\$716m) in countertrade business is looking uncertain following protests by 40 other companies seeking a share in the business.

Imports will be 10 per cent higher under the Commerce Department plan compared with cash deals. They cite a recent deal under negotiation to import Malaysian palm oil.

Snamprogetti wins Siberia smelter order

By Alan Friedman in Milan

SNAMPROGETTI, the plant engineering subsidiary of Italy's ENI state energy group, has won a \$60m (\$42.8m) contract to build in the Soviet Union what it claims will be the world's largest and most automated electrolytic zinc smelter.

China and West Germany in joint rail freight venture

BY JOHN DAVIES IN FRANKFURT

CHINA AND West Germany have set up a joint venture company to promote the use of the trans-Siberian railway for freight.

several years to iron out "weak spots" hampering the country's handling of air freight. As a result, the company is expanding its Peking office and setting up another base in Shanghai to help improve cargo handling.

With the growth of China-bound air tonnage from West Germany, bottlenecks have developed, the company says. One problem has been the limited cargo space in international carriers, although this has improved since the middle of last year.

Dutch leader in call to US on fibre row

MR RUUD LUBBERS, the Dutch Prime Minister, has written to President Ronald Reagan of the US expressing concern about US-Dutch relations becoming strained by a row between two major chemical companies, agencies report.

World shipping faces flat year

BY ANDREW FISHER, SHIPPING CORRESPONDENT

STARRY-EYED optimists are more sceptical of the need to ship after markets have been bumped uncomfortably back to reality in the past year or so.

Costs, the UK shipbroker, said prospects for the early part of 1986 looked bad, though the usual seasonal upturn of April-May could help rates.

The Washington Post Company \$150,000,000 Euro-Commercial Paper Program. The undersigned will act as a dealer. Chase Manhattan Limited January 1986. Chase Investment Bank.

O'Neill predicts tough trade Bill this year

MR THOMAS O'NEILL, speaker of the US House of Representatives, has predicted that Congress would pass legislation this year to force America's trading partners to open their markets to US goods.

TRADE STATISTICS World Economic Indicators. Table with columns for UK \$bn, US \$bn, Japan \$bn, France Fr \$bn, W. Germany DM \$bn and rows for Exports, Imports, Balance for Nov. 85, Oct. 85, Sept. 85, Aug. 85, July 85, June 85.

Contracts & Tenders

Kenya Airways TENDER FOR ADVERTISING. TENDERS ARE INVITED FROM ADVERTISING AGENCIES TO UNDERTAKE: (a) Media advertising in Kenya and overseas locations; (b) Production of display materials for use in Kenya and abroad; (c) Production and/or design work for giveaway and promotional items which may be produced locally or overseas; and (d) Production and/or design materials for use during special events, promotions or exhibitions.

Company Notices

KUBOTA LIMITED European Depositary Receipts issued by Morgan Guaranty Trust Company of New York. MITSUBISHI ELECTRIC CORPORATION Receipts issued by Morgan Guaranty Trust Company of New York.

Why aren't foreign banks making money in Japan? Get the answer to that question and much more in NIPPON FINANCE. The semimonthly newsletter that keeps you on top of the Japanese financial world. Annual Price (24 issues): £200,000 or US\$850.

Gibraltar go-ahead for tourist projects

GIBRALTAR has given the go-ahead for major development projects to boost the colony's tourist industry, Joe Garcia writes from Gibraltar.

Kenya Airways TENDER NOTICE

Kenya Airways RENEWAL OF THE INSURANCE COVERS FOR 1986/87. Tenders are invited for aviation and non-aviation policies and medical insurance scheme for a period 1 April 1986 to 31 March 1987.

ASAHI CHEMICAL INDUSTRY LTD.

ASAHI CHEMICAL INDUSTRY LTD. International Depositary Receipts issued by Morgan Guaranty Trust Company of New York. NOTICE TO BONDHOLDERS PIRELLI UK INTERNATIONAL FINANCE S.V.



# UK NEWS

Tony Jackson on US drug groups' protests at the cuts in NHS business

## Robins to sell British plant

A. H. ROBINS, the troubled US pharmaceutical group, is to abandon drug manufacture in the UK.

Its manufacturing plant at Horsham in Surrey, completed in September 1984 at a cost of £9m, is to be sold for an undisclosed sum to Glaxo, the British drug company.

Robins' UK subsidiary assigns the blame entirely to the UK Government. The limited list of drugs available for prescription through the National Health Service (NHS), which was introduced in April last year, removed almost half its NHS business, Robins said.

Sales of products excluded from prescription under the new system - a combined antihistamine and decongestant called Dimetapp, a number of cough remedies, an antacid, some vitamin preparations and an analgesic - made up about 40m of Robins' UK sales of £12.5m last year.

Robins is something of a special case. Its US parent is seeking protection from its creditors as a result of lawsuits over its intra-uterine contraceptive, the Dalkon Shield.

The Horsham plant was Robins' largest manufacturing investment outside the US. At the plant's dedication ceremony in September 1984 - attended by Mr Norman Fowler, the UK Social Services Secretary - the company spoke optimistically of basing a European research and development centre on the same site.

The project has now been shelved. The limited list has had a particularly dramatic effect on us, but we're unhappy about the Gov-

ernment's general attitude to drug company investment in this country," Robins says.

A number of other US drug companies with operations in Britain evidently agree. Warner Lambert, maker of the excluded cough mixture Bexylin, announced a month ago that it was to close its factory at Eastleigh in Hampshire with the loss of 400 jobs and concentrate manufacture at its other factory at Pontypool in South Wales.

The company, which had lost NHS sales of Bexylin worth close to £5m, made it clear the investment required for relocation in Wales rested heavily on financial help from the Welsh Office. Otherwise, production would have been shifted to the European continent.

Another US company, Lilly, shares that attitude. "From now on," Lilly says, "any new manufacturing process will go to Europe if the economics are equal. In the past few months one animal health project which should have gone to our Liverpool plant has gone to Italy. Another very big biotechnology project which would normally be considered for Liverpool is now being very seriously considered for Ireland."

Lilly is luckier than some companies in that its main excluded product, Distalgesic, with sales of some £10m, can still be prescribed on the NHS as a generic drug at a lower price. "But that's quite unacceptable to our US management," Lilly UK says. "It's an extreme case of

intellectual property being expropriated."

Unlike some foreign drug companies, Lilly does a significant amount of research in the UK. Its UK research and development (R&D) establishment employs more than 300 staff and is by far the company's biggest outside the US.

"We had been steadily increasing our UK R&D expenditure over the past six years," Lilly said. "Now we've told the Government that we're cutting our investment right back. We won't be making any major new investments, though we will maintain the establishment."

"R&D is a very long-term investment and you have to keep an eye on continuity. But with manufacturing, which more often consists of discrete projects, the effect is bound to be more immediate."

Another US company which claims to have cancelled production projects at Sandwich, Kent, worth £15m-£20m, Pfizer has been scarcely affected by the limited list. "But the list certainly added to the lack of confidence in the industry," Pfizer said.

Wyeth, a subsidiary of American Home Products of the US, has cut 250 jobs at manufacturing sites in the UK. Like Lilly, Wyeth has found that its chief products, benzodiazepine tranquilisers, can now be prescribed only as lower-priced generic drugs.

The change has affected half of Wyeth's £34m UK turnover. Wyeth has also decided to cancel a planned

R&D investment worth £30m at Swindon, Wiltshire.

There is a case for treating the claims of all these companies with caution. The high quality and relative cheapness of British researchers still gives the UK considerable attractions as a research base. Since the introduction of the limited list, one US company, Damon Biotech, has announced plans for a £30m biotechnology plant in Scotland. Upjohn of the US is considering a research plant in Scotland costing up to \$50m.

On the other hand, both projects would rely heavily on finance from the Scottish Development Agency. Taken with Warner Lambert's relocation to Pontypool, this suggests that the UK's present attractions as a home to international drug companies might depend on government cutbacks being made good financially at the local level.

Besides the limited list, the industry is aggrieved over the basic level of remuneration now granted under the NHS. The annual discussions over profit levels for the coming year will be taking place in the next few weeks. The industry is optimistic that after several years of reduced profitability the Government will change direction.

Although haggling over NHS pricing is a familiar process for the industry, the limited list is another matter. The delisting of established products is regarded as a breach of trust and the abrupt and unilateral way in which the system was introduced was evidently unnerving.

47 Electrical and Electronic companies, 2 Freight Forwarding agencies, 6 Printers and Publishers, 3 Haulage companies, 10 Computer companies, 22 Business and Secretarial services, 4 Packers, 2 Robotic Engineering companies, 25 Mechanical Engineering works, 15 Precision Engineering groups...and a man who makes printed circuit boards.\*



## Data base shows industrial aid in EEC

BY MARK MEREDITH, SCOTTISH CORRESPONDENT

DETAILS of government industrial aid schemes throughout the European Community are available on a computerised data base to be launched this week.

Private companies will be able to use their own computers to interrogate a computer based at the University of Strathclyde, Glasgow. About 800 schemes in 10 EEC member countries are covered.

Assistance available in the Community's new members, Spain and Portugal, will be added later.

The project, called Euroloc, is the result of three years of preparation by the Centre for the Study of Public Policy at Strathclyde.

Companies considering a new location in Europe will be able to

compare government financial assistance packages and note individual qualifications and conditions such as the duration of financial assistance, location restrictions, aid destined for particular industries and the amount of assistance available.

The Glasgow data base, part of the university's VAX computer, is menu-driven, which makes cross-references and interrogations simple for subscribers.

Targets for aid are classified according to problem areas, research and development, small business development, aid for specific industrial sectors, structural adaptation, for companies in difficulties, grants and assistance for employment and

training, energy-related projects, environmental protection and export promotion.

Also available are statistics on EEC member countries' economies which can be interrogated and compared. The data base has over 3,500 pages of information.

The project is led by Professor Kevin Allen and Mr Douglas Yull, senior research fellow at the Centre for Policy Studies.

The data base has been partly financed by the European Commission's information technology directorate but is designed to be self-financing, based on subscription.

Euroloc aims to provide information rather than to assess the merits of various types of government

assistance. The data base covers only national assistance and does not include aid available from local authorities in each country.

The data has been assembled from information sent in by EEC member governments and by monitoring national newspapers and government press releases. Members of the centre also travel throughout the Community to gather and update material.

English is the main language of the data base.

Prof Allen's unit at Strathclyde produced the annual European Regional Incentives study which, in book form, compares aid available in problem areas throughout the EEC and Sweden.

Glenrothes has over thirty years experience of establishing an infrastructure that makes sense for business development.

Over thirty years of providing a sound industrial base for the widest range of companies has resulted in a continual pattern of successful growth for the community - the businesses mentioned

above are but a small proportion of those enjoying all the benefits of a continual association with Glenrothes Development Corporation.

\*With support from Glenrothes Development Corporation Michael Conway has set up his own company - C. B. Circuits, to produce printed circuit boards.

### GLENROTHES DEVELOPMENT CORPORATION

FOR FURTHER INFORMATION PLEASE CONTACT: JOHN McCOMBIE, COMMERCIAL DIRECTOR, GLENROTHES DEVELOPMENT CORPORATION, BALBRINE HOUSE, GLENROTHES, FIFE, SCOTLAND KY16 7NL. TELEPHONE: 0592-754343. TELEFAX: 727125.

It's a tough world for manufacturers. So it's hardly surprising that many will go to great lengths to stay competitive. But before you start looking for answers thousands of miles away, talk to British Gas. We'll show you that using gas as a fuel can do as much for your bottom line as it does for your production line. Clean, efficient gas is the reliable, high quality fuel, which means a more reliable manufacturing process. Often achieving a better end product altogether. It's also economical to use, producing significant savings in fuel costs. This can result in increased productivity, a lower unit cost and greater profitability. But that's not the end of the story. With the advances made by modern technology in the past few years, gas is more versatile and efficient than ever, and even simpler to maintain. Converting to gas can be a matter of just changing the burner in your existing system. Or we can help you develop a whole new manufacturing process with the assurance of plentiful supplies of gas long into the future. Even a major investment in gas can pay for itself in no time at all with the day to day

## How far would you go to get a lower unit cost?

savings in running costs it will make. And your competitors could end up paying too, by losing market share to your better, less expensive product. To arrange an appointment with the industrial specialist of your local British Gas region, all you have to do is dial 100 and ask for FREEPHONE INDUSTRIAL GAS. Unlike a 'phone call to the Far East, it won't cost you anything, but it could cost your competitors a great deal. **British Gas Gas fuels profits.**

GET MORE FOR YOUR MONEY



UK NEWS

Alliance parties agree seat allocation

By Peter Hiddell THE LIBERAL and Social Democratic Alliance has removed a major source of internal tension, after final agreement on the allocation between the two parties of parliamentary seats to be fought at the next general election.

A basis of agreement now exists in every seat after compromises by both Dr David Owen, the SDP leader, and some Liberal activists. These involve the selection of candidates in over 60 seats jointly by members of both parties.

The agreement is an important stage in closer Alliance relations after previous disagreements. At this stage of the last Parliament, in early 1982, seat negotiations were temporarily suspended by Mr Bill Rodgers of the SDP.

The result of the lengthy negotiations is that each party will fight more than 300 out of the 635 main constituencies in Britain, keeping the rough parity which has been the aim throughout.

The key part of the agreement is that in more than 60 seats candidates should be picked on the basis of joint open selection - that is, from members of either party by members of both.

Electricians set for fresh clash on TUC policy

By HELEN HAGUE, LABOUR STAFF

THE ELECTRICIANS' union EETPU appears poised to defy the formal advice of Mr Norman Willis, general secretary of the Trades Union Congress (TUC), not to countenance a single union agreement with News International for its new printing plant in Wapping, East London.

Such a move would again raise the prospect of suspension - or expulsion - of the union from the TUC.

Last night Mr Tom Rice, the EETPU's officer responsible for national newspapers, said that if Mr Willis persisted in his stance he would recommend to his union's executive next week that the union accept News International's invitation to hold national-level talks.

News International, owned by Mr Rupert Murdoch, intends to start a new London newspaper, The Post, at the Wapping plant this year.

Mr Willis' advice was issued to all print unions in late December, days before the deadline set by Mr Murdoch for negotiations on recognition at the plant expired.

The TUC's Printing Industries Committee - which brings together leaders and representatives of all print unions - is due to reconvene on Friday. Mr Rice will then make his views on the question of recognition at Wapping known.

He said last night "I am concerned that Norman Willis' letter could be construed as an instruction to me not to enter into negotiations with the company. Every other union has held talks at national level with the company. We have not yet done so. I am worried that this is an attempt to stop us from exercising our legitimate right to represent our members' interests."

Mr Willis' advice was issued to all print unions in late December, days before the deadline set by Mr Murdoch for negotiations on recognition at the plant expired.

The determined nature of the attacks and the inability of politicians to halt them contrasted with an outbreak of more spontaneous violence during a similar protest at Maryfield last month.

Senior Unionist politicians were dismayed that loyalist paramilitarists, who had previously remained in the background in the campaign against the London-Dublin accord, had apparently decided to make their presence felt.

New daily paper to name backers

By Raymond Snoddy

THE NEW quality national daily newspaper planned by former Daily Telegraph journalists will tomorrow announce the names of six institutional backers investing a total of £2m.

Mr Andrew Whittam-Smith, editor and chief executive of the proposed new daily, said yesterday that the first-round finance was coming from investment trusts and unit trust groups.

"They are all familiar names in the City of London, nothing obscure, all British and all blue-chip," said Mr Whittam-Smith, former City editor of the Daily Telegraph.

He said that the first six institutions to be approached had agreed. All six will also participate in the second round, designed to raise an additional £15m to £16m in equity and loan stock within the next two months.

The company, Newspaper Publishing, will come into legal existence tomorrow and hopes to sign later this month a lease for offices in London's City Road. The journalists plan to announce the name of the broadsheet newspaper within the next few weeks.

The newspaper, due to be launched in the first week of October, will not, according to Mr Matthew Symonds, deputy editor, be identified with any party line. It will tend to be free market in economic policy, liberal on social issues and pragmatic on foreign affairs.

The first dummy issue of the newspaper will be completed this week and detailed market research will then be carried out. Research on the concept, Mr Symonds said, produced a high response in the target audience - 22-45 year-olds in the higher social groups. The break-even circulation is said to be just under 300,000.

The newspaper will be printed under contract by unionised houses in different parts of the country. Senior staff have already been recruited for the newspaper, which will use the latest computer technology.

Filmless cameras in focus

FILMLESS still cameras are as outlandish a concept today as horseless carriages must have been in the early 1800s. Yet the coming year may see them capture a central place in commercial and technological debate about the future of the sluggish world market in photographic equipment.

Development work by leading companies has continued quietly in the four years since Sony, the Japanese audio and video products group, first publicly displayed - perhaps prematurely - the prototype Mavica. A still camera, it stored its images not on conventional silver-based film but on a magnetic disk.

It bypassed the tedious business of processing and printing; the Sony Mavica's disk could be played back through a video system, and the pictures viewed on a television screen.

Poor-quality images and the Mavica's high cost (possibly in the region of £1,000 each) rendered the product something of a white elephant. It has not yet been put on sale.

There are fresh signs, however, that electronic still photography is

Nick Bunker looks at a photographic concept which would bypass the business of processing and printing

"a goer, with a capital G," in the words of Mr George Hughes, editor of the British magazine Camera Weekly.

"The Japanese have said for a long time that they see the future of home entertainment revolving around the television," he says. "It makes sense to put photography there as well."

Current stagnation in camera sales offers manufacturers an incentive to investigate a technology that might evoke new consumer interest.

In Britain, total annual camera sales, which stood at £33.2m in 1978, fell to £29.5m in 1984, after a peak in the early 1980s.

Canon, Japan's top 35mm camera manufacturer, has said it expects to

begin marketing to professionals some time this year a colour electronic filmless still camera based on a model used experimentally by Japanese press photographers at the 1984 Los Angeles Olympics.

At its heart will be a finger-activated semi-conductor, known as a charge-coupled device (CCD), that can convert images picked up through the lens into electronic signals recorded on a floppy disk.

Again, the disk can be inserted into a playback device and the photographs viewed instantly on a screen. Alternatively, they can be transmitted down telephone lines to a newspaper office, or printed out using another special unit.

Such technology does not come cheaply. Unconfirmed reports suggest that the Canon camera alone might cost more than £1,000. If the high price is one factor limiting use of the filmless camera, the other is the present inferiority of their pictures.

Electronic imaging. It is argued, will never match the quality of silver-based film, itself subject to continuing technical improvements.

Canon's camera demonstrated in Los Angeles featured a CCD capable of handling 400,000 separate pieces of visual information - considerably more sensitive than the Mavica's and adequate for producing newspaper pictures, but still far less sensitive than most films.

Manufacturers might opt instead for a cheap still video playback system without a new form of camera. Eastman Kodak is scheduled to begin North American consumer trials of such a system.

It will use a unit in a photofinishing laboratory to transfer images from ordinary camera film to floppy disks, each storing up to 50 pictures, which a customer can play back via a unit attached like a video cassette recorder to a home TV set.

By early 1987, Eastman Kodak says, the system might be on the market; Fuji Photo Film, the company's key Japanese rival, began selling a comparable system in Japan more than six months ago.

Record £6.2bn raised on London market

By MICHAEL PROWSE

A RECORD £6.2bn was raised by British and foreign companies on the London stock market last year, according to figures released by the Bank of England.

The rate of capital issues was 72 per cent higher than in 1984, which was also a buoyant year. In the early 1980s, only about £2bn to £3bn of new money was raised in London capital markets.

The unprecedented volume of new issues in 1985 reflected the buoyancy of stock market prices and accompanied a wave of industrial fixed investment spurred by tax changes in the 1984 budget. The hunger for new money also reflected the unusual intensity of corporate takeover and merger activity.

After allowing for £1bn of redemptions, the net new money raised last year was £5.2bn, 80 per cent of which was ordinary shares. UK public companies raised a net £5.1bn, overseas borrowers raised

£675m and British local authorities and public corporations repaid £566m.

Among public companies, industrial and commercial groups raised £4.1bn and financial institutions £1bn. Less than 60 per cent of industrial capital issues came from the manufacturing sector - service industries also showed a keen appetite for funds.

The service sector raised nearly £1.5bn on capital markets last year. Wholesale and retail distributors, hotels and restaurants and repair companies alone raised £800m. The transport and communication sector raised £222m.

Last year also saw a further increase in the volume of new issues on the London unlisted securities market. A total of £1.68bn was raised against £1.59bn in 1984. Most of the money was raised in the form of ordinary share issues by UK industrial companies.

Arthur Sandles, writer of wit and authority

ARTHUR SANDLES, who died in Switzerland yesterday at the age of 50, was one of the FT's most talented writers. He made an outstanding contribution to the development of the paper over the past 20 years, not only in the field of travel and tourism where he achieved an international reputation, but in many other ways.

He will be remembered for the warmth of his personality, his unfailing good humour and his infectious enthusiasm for new ideas. He will be deeply missed by his friends and colleagues on the FT and outside.

He began his journalistic career on the Kentish Times group, later working in broadcasting and provincial evening papers. He joined the Financial Times in 1961 as a labour reporter. From his first days on the FT he tackled every job that came his way with relish, rapidly establishing himself as a versatile, fluent and thoroughly reliable writer on a wide range of subjects.

While he was always happiest in a writing role, he also showed considerable editing skills. In 1977 he was asked to redesign and take charge of the leisure sections of the Saturday FT, a task in which he showed flair, originality and a remarkable ability to get the best out of his contributors.

In recent years he concentrated primarily on travel, tourism and the leisure industries, although he was

always keen to volunteer for any assignment, however remote from his main responsibilities, where his writing talent - and his taste for the off-beat story - could be put to good use. In his travel articles which appeared almost every Saturday he was able to convey the flavour and atmosphere of the many exotic places he visited while never forgetting the practical needs and interests of the ordinary tourist. His column on climbing Mount Kilimanjaro, which appeared in November of last year, was an example of travel writing at its best.

Arthur had a particular love for skiing and he reported from skiing resorts all over the world. He was himself a dedicated and skilled enthusiast who for many years had done much to promote winter sports and travel among the British public.

He had the invaluable gift of combining a lively writing style with clarity and authority. On the business side of the leisure industry - and of the other subjects which he covered, such as broadcasting - he showed a depth of understanding which was much appreciated by the people he wrote about. His advice was often sought by leading businessmen in the leisure field.

In all his work for the Financial Times - writer, editor and colleague - Arthur brought a spark of wit and gaiety to a newspaper which is always in danger of becoming too solemn. As a journalist and a man, he won the respect and affection of all who came into contact with him.

G. O.

Scope for tax cuts reduced, says broker

Financial Times Reporter FALLING oil revenues have cut in half the scope for tax cuts in this year's budget, argues Simon & Coates, the broking firm, in its latest economic assessment, published today.

It says the Chancellor of the Exchequer will be able to cut taxes by only £1.6bn in March. Last year the Treasury had pencilled in tax cuts of up to £3.7bn.

The reduced scope for tax cuts reflects the broker's forecast that oil revenues will decline steeply - from £11.8bn in the current financial year to only £7.6bn in 1986-87. Taken by itself, the £4bn drop in projected oil revenues would eliminate entirely the scope for tax cuts. But it should be partially offset by the buoyancy of non-oil revenues, which are expected to exceed official projections by about £2bn.

Company Notices

- EUROPEAN COAL AND STEEL COMMUNITY (ECSC) Established by the treaty which was signed in Paris on the 18th of April 1951. KIRCHBERG - LUXEMBOURG (GREAT DUCHY OF LUXEMBOURG) Head Office: 1972-1988. Financial Times Code: 225 705. Numerical list of the 24 banks shown in the brochure attached for redemption on the 15th December 1985 and redeemable from the 30th of January 1986 at FF250,000 per bond. All previously drawn bonds were paid.

BASE LENDING RATES

A&W Bank	11.5%	Guinness Mahon	11.5%
Allied Dunbar & Co.	11.5%	Hambros Bank	11.5%
Alfred Irish Bank	11.5%	Heritable & Gen. Trust	11.5%
American Express Bk.	11.5%	Hill Samuel	11.5%
Amro Bank	11.5%	C. Hoare & Co.	11.5%
Henry Ansbacher	11.5%	Hongkong & Shanghai	11.5%
Associates Corp. Corp.	12%	Johnson Matthey Bkrs.	11.5%
Banco de Bilbao	11.5%	Knowles & Co. Ltd.	12%
Bank of Montreal	11.5%	Lloyds Bank	11.5%
Bank Leumi (UK)	11.5%	Edward Manson & Co.	12.5%
BCCI	11.5%	Meghraj & Sons Ltd.	11.5%
Bank of Ireland	11.5%	Midland Bank	11.5%
Bank of Cyprus	11.5%	Morgan Grenfell	11.5%
Bank of India	11.5%	Mount Credit Corp. Ltd.	11.5%
Bank of Scotland	11.5%	National Bk. of Kuwait	11.5%
Bankers Trust	11.5%	National Giro Bank	11.5%
Barclays Bank	11.5%	National Westminster	11.5%
Benedictine Trust Ltd.	12.5%	Northern Bank Ltd.	11.5%
Brit. Bank of Mid. East	11.5%	Norwich Gen. Trust	11.5%
Brown Shipley	11.5%	People's Trust	12.5%
CI. Bank Nederland	11.5%	Prudential (UK)	12%
Canada Permanent	11.5%	Provident Trust Ltd.	11.5%
Cayzer Ltd.	11.5%	R. Raphael & Sons	11.5%
Cedar Holdings	12%	Roxburgh Guarantee	12%
Charrabus Jax	11.5%	Royal Bank of Scotland	11.5%
Citibank NA	11.5%	Royal Trust Co. Canada	11.5%
Citibank Savings	11.5%	Standard Chartered	11.5%
City Merchants Bank	11.5%	T.C.B.	11.5%
Creditale Bank	11.5%	Trustee Savings Bank	11.5%
C. E. Coates & Co. Ltd.	12%	United Bank of Kuwait	11.5%
Comm. Bk. N. East	11.5%	United Mirrabai Bank	11.5%
Consolidated Credits	11.5%	Westpac Banking Corp.	11.5%
Continental Trust Ltd.	11.5%	Yorkshire Bank	11.5%
Co-operative Bank	11.5%	Yorkshire T. & M. Co.	12%
The Cyprus Popular Bk.	11.5%	Members of the Accounting Houses	
Duncan Lawrie	11.5%	Commis.	
E. T. Trust	12%	7-day deposits 8.00% - 1-month 8.50% - Top Tier - £2,000+ at 3 months since 11.25%. At call when £10,000+ remains deposited. Call deposits £1,000 and over 8.00% gross. 21-day deposits over £1,000 a 25% mortgage base rate. Demand dep. 8%. Mortgage 13%.	

THE HOKKAIDO TAKUSHOKU BANK LIMITED (Incorporated with limited liability in Japan) Garrard House, 31-45 Gresham Street, London EC2R 7BD US\$10,000,000.00 Callable Negotiable Floating Rate Dollar Certificates of Deposit due 17th February 1987 In accordance with the provisions of the Certificates, notice is hereby given that The Hokkaido Takushoku Bank Limited ("The Bank") will prepay the principle amount on the next interest Payment Date, 14th February 1986, together with interest accrued to that date. Payment will be made against presentation and surrender of the Certificates at The Bank's London Branch. Agent Bank First Chicago Limited

AVAILABLE FROM JANUARY 13th NEW TRIDENT GOLD FROM BRITANNIA UNBEATABLE AT EVERY LEVEL

TRIDENT GOLD	9.25% NET	13.21% GROSS EQUIVALENT
TRIDENT GOLD PLUS	9.55% NET	13.64% GROSS EQUIVALENT
TRIDENT SUPER GOLD	9.80% NET	14.00% GROSS EQUIVALENT

And, with Trident Gold, you choose the interest rate. There are three, depending on the size of your initial investment. £250 or more, for example, earns a full 9.25% net; £5,000 or more earns 9.55% net; whilst £10,000 or more qualifies you for no less than 9.80% net - all three paid annually. (We also offer monthly interest on all investments over £1,000. See table for details)

Simple. Flexible. No notice. No nonsense. We think you'll find it difficult to get a better all-round deal from any other national building society. If you're going for Gold, come to Britannia.



Britannia Building Society

DON'T INVEST A PENNY UNTIL YOU'VE CHECKED WITH US BRITANNIA BUILDING SOCIETY, NEWTON HOUSE, LEEK, STAFFS, ST13 9RG. TEL: 0538 3851. ESTABLISHED 1864. A MEMBER OF THE BUILDING SOCIETIES ASSOCIATION. FOR BRANCHES AND AGENTS SEE YOUR LOCAL DIRECTORIES. AUTHORISED FOR INVESTMENTS BY TRUSTEES. ASSETS NOW EXCEED £3,000 MILLION.



UNITED STATES BANKRUPTCY COURT FOR THE SOUTHERN DISTRICT OF ALABAMA

IN RE: MARION CORPORATION Debtor

CASE No. 83-00373

NOTICE AND ORDER (1) APPROVING DISCLOSURE STATEMENT AND ANCILLARY MATERIALS...

1. The Disclosure Statement dated October 21, 1985 as amended...

2. The Disclosure Statement, be, and it is hereby, approved pursuant to section 1125(b) of the Bankruptcy Code.

3. All Proponents of the Plan are hereby authorized to solicit acceptance of the Plan.

4. On or before December 23, 1985, Marion shall at its expense cause the Disclosure Statement and all documents referred to in this paragraph to be duplicated or printed and Marion shall transmit by mail to its schedule holders of a claim or interest in classes 3a, 4a, 4b, 5, 6, 7, 8, under the Plan and to those entities that have filed proofs of claim or interests (a) copy of the Plan...

5. Acceptances or rejections of the Plan must be in writing and to be counted must be received by Marion on or before 5:00 p.m. Central Time on January 25, 1986 at One Marion Avenue, Daphne, Alabama 36624.

6. Any and all objections to confirmation of the Plan must be in writing and must be filed with the Bankruptcy Court on or before January 14, 1986, together with proof of service on:

ATTORNEYS FOR MARION: McDermott, Stepan, Windom & Reed, 211 North Conception Street, Mobile, Alabama 36602.

ATTORNEYS FOR BANK CREDITORS: Cabanis, Johnston, Gardner Dumas & O'Neal, 2210 First National Bank Bldg, Mobile, Alabama 36602.

ATTORNEYS FOR THE CREDITORS' COMMITTEE: Sheinfeld, Masley & Kay, 3700 First City Tower, Houston, Texas 77002.

ATTORNEYS FOR THE GUARANTYHOLDERS' COMMITTEE: Loring, Esq., 700 West Irving Park, Suite A-1, Chicago, Illinois 60613.

7. To the extent, if any, that ballots in respect of the Plan are sent to the statutory committees...

8. The hearing to consider confirmation of the Plan will be held on January 27, 1986 at 9:30 a.m. in Room 229 of the United States Courthouse, 113 So. Joseph Street, Mobile, Alabama.

Confirmation of the Plan may discharge all claims against Marion as of confirmation date.

Mobile, Alabama Dated December 5, 1985

UNITED STATES BANKRUPTCY COURT SOUTHERN DISTRICT OF ALABAMA

CASE No. 83-00373 (ANS) NOTICE OF VOTING PROCEDURE ON PLAN OF REORGANIZATION

TO HOLDERS OF MARION INTERNATIONAL FINANCE N.V. 9% GUARANTEED SUBORDINATED DEBENTURES DUE 1995:

PLEASE TAKE NOTICE that Marion Corporation has received Court approval of a Disclosure Statement relating to its "Plan of Reorganization."

A ballot and a copy of the Disclosure Statement have been sent to all known holders of Eurobonds. A ballot and a copy of the Disclosure Statement may be obtained from:

EUROBOND OPERATIONS CENTER P.L.C. c/o Morgan Guaranty Trust, 35 Avenue des Arts, 1040 Brussels, BELGIUM

ALL Eurobond holders who wish to vote on the Plan must deposit their Eurobonds either with J. Henry Schroder Bank & Trust Company, Euroclear, Cedel or any bank or trust company which is a member of the New York Clearing House Association...

NOTICE OF REDEMPTION: Armo Overseas Finance N.V. U.S. \$50,000,000 15 1/2% Guaranteed Notes Due December 1, 1986

Notice is hereby given that Armo Overseas Finance N.V. has elected to redeem all of its outstanding 15 1/2% Guaranteed Notes Due December 1, 1986 (the "Notes") on January 31, 1986 (the "Redemption Date")...

All Notes, together with all coupons appertaining thereto maturing on December 1, 1986, are to be surrendered for payment of the Redemption Price at the Corporate Trust Office of the Bankers Trust Company in the Borough of Manhattan, The City of New York...

Armo Overseas Finance N.V. By: Bankers Trust Company of Financial Agent

December 30, 1985

BUSINESSMAN'S DIARY

UK TRADE FAIRS AND EXHIBITIONS

- Current: London International Boat Show (0882 54511) (until January 12) Earle Court
- January 9-12: Holiday and Travel Fair (021-790 4171) NEC, Birmingham
- January 11-16: Harrogate International Toy Fair (01-425 6853) Harrogate
- January 12-16: International Light Show (05894 358) Olympia
- January 13-15: Amusement Trades Exhibition (01-228 4107) Olympia
- January 14-17: Which Computer? Show (01-681 5051) NEC, Birmingham
- January 16-19: Ideal Home Exhibition (0202 296275) Brighton
- January 18-22: Stationery Industry Exhibition - NEC, Birmingham

OVERSEAS TRADE FAIRS

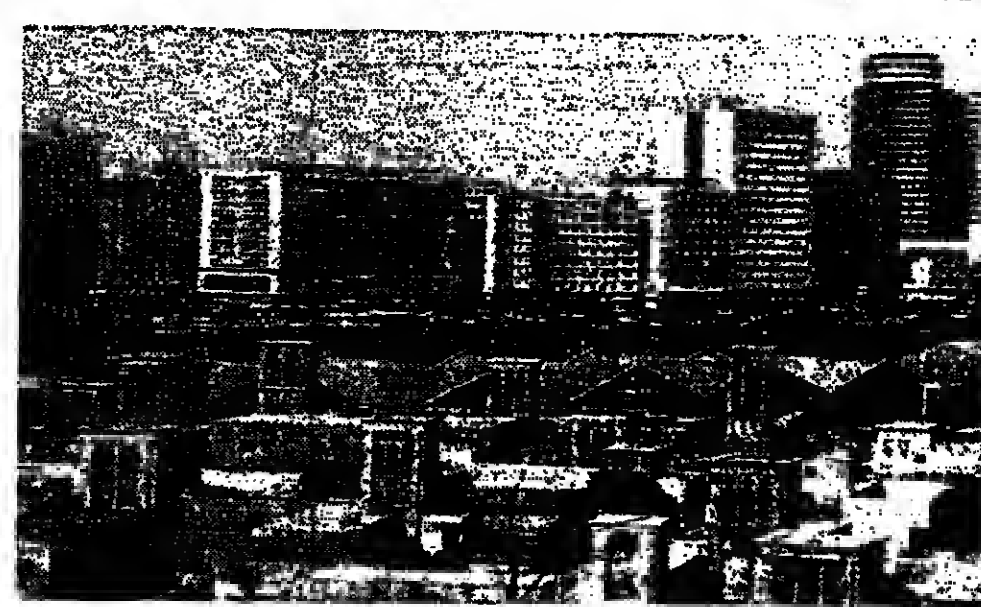
- Current: International Hotel and Catering Industries Trade Fair - HDRECAVA (01-457 2175) (until January 9) Amsterdam
- January 7-9: Computers, Communications and Business Equipment Exhibition - INFO / SOUTHWEST (01-639 5081) Dallas
- January 9-14: International Lighting Show (01-439 3064) Paris
- January 11-19: International Caravan, Motor and Tourism Exhibition - CMT (01-236 0911) Stuttgart
- January 14-18: International Furniture Show (until January 9) Cologne
- January 15-16: Asian Aerospace Exhibition (01-891 5001) Singapore
- January 22-25: International Pollution Monitoring and Control Exhibition and Conference - ENVIROTECH (01-231 2048) Bombay
- January 24-27: Duty Free Exhibition (01-642 7658) Dubai

BUSINESS AND MANAGEMENT CONFERENCES

- January 7-8: Unicorn Seminars: Fundamentals of 3D graphics (01-940 7716) Ferma Hotel, SW7
- January 12-14: Institute of Personnel Management: The secretary in personnel management (01-646 9100) Kensington Close Hotel, W8
- January 12-14: FT Conferences: Aerospace in Asia and the Pacific Basin (01-621 1355) Singapore
- January 12: Brunel Institute: How effective is your training function? (0895 56451) Brunel University, Uxbridge
- January 14-15: Crown Eagle Communications: Effective project management (01-942 4111) Tower Hotel, E1
- January 16: Oyez/IBC: Bankers' security and the new insolvency act (01-238 4080) Royal Lancaster Hotel, W2
- January 20: Frost and Sullivan: The impact of emerging technologies on your firm (01-935 3190) Ryzant Carlton Tower, W1
- January 21-22: FT Conferences: Regulating the Financial Services Industry (01-621 1355) Hotel Inter-Continental, W1
- January 22: Brunel Institute: How effective is your personnel department? (0895 56451) Brunel University, Uxbridge

Anyone wishing to attend any of the above events is advised to telephone the organisers to ensure that there has been no change in the details published.

CONSTRUCTION CONTRACTS



The high-rise commercial blocks on the Deira bank of The Creek contrast with the old windtowers of the Bastakiya district of Dubai in the foreground. The ruler's office is on the extreme left. The village was first settled about 80 years ago by the Pharoese, mostly Sumale, from southern Iran. More arrived in the 1830s when the Raza Shah's legionaries established the well. The windtowers are the oldest and cheapest form of air-conditioning known.

Diwan to be built in Dubai

The Government of Dubai has signed a Dhs 120m (£22.8m) contract for the construction of the new Diwan with BEL HASA ENGINEERING & CONTRACTING CO. of Dubai. Bel Hasa, in joint venture with English company Six Construct, submitted the lowest bid out of nine tenders. Other companies competing in the tender were Leding Enterprises; Al Habtoor Engineering Enterprises; Dutco Balfour Beatty; Taylor Wood-

row; Al Futaim Wimpey; Al Ashram Contracting Company; All Madia Construction Co, and Al Naboodah Contracting Company. Construction is due to start this month and the project should be complete 20 months later. The design, prepared by John R. Harris & Partners, reflects the traditional character of the historic buildings in the Bastakiya area and adjoining the Creek.

Elida Gibbs extension

BALFOUR BEATTY has been awarded a contract in Leeds for alterations and extension to production and technical facilities for Elida Gibbs, part of the Unilever Group. Valued at £3.7m, the work involves demolition, extension and alterations to the production, marshalling and bulk storage areas, a new technical office block, a new laboratory block, alterations to existing canteen and office facilities and external works and drainage. The major element is the new production building which is of structural steel and in situ reinforced concrete construction, finished with cladding and flexible metal decking. The technical block is also structural steel but with precast concrete floors, decking and clad in textured brickwork and curtain walling. Work has started for completion in 12 months.

£12m batch for Longley

JAMES LONGLEY & CO has won contracts worth £12.5m for projects in Berkshire, Buckinghamshire and Hampshire. Work in Maidenhead includes a £5.3m construction of four high technology blocks totalling 120,000 sq ft for the Water Authority Superannuation Fund, and a £1.6m office, warehouse and warehouse to provide a new UK headquarters for Northern Telecom Communication Systems Group.

Liverpool hospital

TYSONS (CONTRACTORS), Liverpool, has secured £10.5m orders made up of: Nuclear hospital at Broadgreen, Liverpool (£8.5m); refurbishment of Richard Shopp throughout the country (£1.5m); and a Habitat store at Kingston-on-Thames (£0.5m).

For Midlands Shoes in Reading, Longley is building a £2.9m headquarters complex, which includes offices, warehouses and residential units together with refurbishment of listed properties. A £1.8m redevelopment of a 200 year old country house is underway in Marlborough for the Merchant Navy Ratings Pension Fund Trustees. Under a design and build contract, a two-storey high tech industrial scheme for Ebury Developments has begun at Hook, Hampshire, on a fast track programme of 32 weeks.

Own land in the great American West. America's most beautiful landscapes in the West. More than two hundred years old and still waiting for many people to claim their share of it. For themselves and for the future of their families. Imagine one of the most beautiful landscapes in the West and what it could mean to have part of it for your own.

FORBES EUROPE SANGRE DE CRISTO RANCHES INC. P.O. BOX 68 LONDON SW11 3UT ENGLAND. What more perfect way to stake your claim than by purchasing five glorious acres in the Colorado Rockies for yourself and those you love. At Sangre de Cristo Ranches you can still own a sizeable piece of America at a very modest cost and on easy credit terms. This is scenic land in one of the fastest-growing states in the USA, a piece of the unspoiled, romantic old Southwest. Sangre de Cristo Ranches is a subsidiary of Forbes Inc., publishers of the highly respected American business and financial publication, FORBES MAGAZINE. The land being offered for sale to you is a part of the huge 258,000-acre Forbes Trinchera Ranch, one of the oldest of the remaining big ranches in America. A sportsmen's paradise in all seasons for hunting, fishing, riding, hiking and boating. With fine skiing less than 50 miles away, the ranch ranks among the world's best-known preserves for deer, elk, game birds and other wildlife. You can own majestic mountain views of Trinchera Peak and Mount Blanca (higher than Pikes Peak) which stand as silent sentinels protecting the rolling foothills and valley that make up our Sangre de Cristo Ranches. The land lies about 200 miles southwest of Denver, just east of US Route 160... the Navajo Trail. Its town is historic Fort Garland, the last command of Kit Carson. For as little as \$4,500 total cash price you can purchase your own 5-acre Sangre de Cristo Ranch, with payments as low as \$45 monthly. Important money-back and exchange privileges backed by FORBES MAGAZINE's distinguished reputation have contributed much to the great success of this unusual land offering. Five or more acres of this land can be yours. Easy credit terms available. For complete details on this wonderful opportunity, without obligation, please fill in and mail coupon today.

Financial Times Conferences

THE SECOND FT-CITY SEMINAR London—January 27, 28 and 29, 1986

Following the highly successful three-day intensive version of the FT City Course held in London last January, the Financial Times is pleased to announce that this FT City Seminar is to be held again from January 27 to 29 at the Skinner's Hall in the City of London. Describing how business is done in London and commencing upon the changes stemming from the financial services revolution will be Dr Michael von Clemens of Credit Suisse First Boston. Mr Wm Bishopp of Schroeders, Mr Pen Kent of the Bank of England, Mr Christopher Johnson of Lloyds Bank and Mr David Malcolm of Royal Insurance who are among a most interesting panel of contributors. The chair is to be taken again by Mr Marj Lee, the FT Conference Advisor, and the proceedings will cover a very wide range of City activities. The Seminar allows ample time for questions, discussion and contact-making.

THE LONDON MOTOR CONFERENCE —The Outlook for the Aftermarket London—February 17, 1986

Financial Times motor industry conferences have developed strongly in recent years and last September's World Motor conference in Frankfurt was particularly well received. Sessions devoted to the aftermarket at that and earlier FT motor conferences attracted much interest and the FT is pleased to announce this major one-day meeting to be held in London at the time of the Autopart '86 Exhibition. This year's agenda will concentrate on developments in the aftermarket and speakers will assess medium and longer term trends as well as what is happening now in a significant, but previously often under-rated, sector of the motor industry. Mr John Wormald of BovaAllen & Hamilton will chair the meeting and Mr Roy Rogers of General Motors Service Parts Operations—United Kingdom will deliver the keynote address. Other speakers include: Mr Y. C. Kim of the Panther Car Company; Mr Tom Farmer of Kwik-Fit Holdings and Mr John W. Harland of Forward Trust Group.

All enquiries should be addressed to: The Financial Times Conference Organisation, Minister House, Arthur Street, London EC2A 9AX. Tel: 01-621 1355 (24-hour answering service). Telex: 27347 FTCONF G. Cables: FINCONF LONDON



Company Notices

PRESIDENT STEYN GOLD MINING COMPANY LIMITED

Notice is hereby given that a general meeting of the members of President Steyn Gold Mining Company Limited will be held at 44 Main Street, Johannesburg, on Tuesday, January 28 1986, at 10:00 am...

FREE STATE GEDULD MINES LIMITED

Notice is hereby given that a general meeting of the members of Free State Geduld Mines Limited (the company) will be held at 44 Main Street, Johannesburg, on Tuesday, January 28 1986, at 10:00 am...

PRESIDENT BRAND GOLD MINING COMPANY LIMITED

Notice is hereby given that a general meeting of the members of President Brand Gold Mining Company Limited will be held at 44 Main Street, Johannesburg, on Tuesday, January 28 1986, at 10:00 am...

WESTERN HOLDINGS LIMITED

Notice is hereby given that a general meeting of the members of Western Holdings Limited (the company) will be held at 44 Main Street, Johannesburg, on Tuesday, January 28 1986, at 10:00 am...

WELKOM GOLD MINING COMPANY LIMITED

Notice is hereby given that a general meeting of the members of Welkom Gold Mining Company Limited (the company) will be held at 44 Main Street, Johannesburg, on Tuesday, January 28 1986, at 10:00 am...

EAST RAND PROPRIETARY MINES, LIMITED

The directors of East Rand Proprietary Mines, Limited announce that the company intends to raise R27.1 million by way of a rights offer of shares of R1 each in the ratio of one new share for every nine shares...

P.S.A. PEUGEOT-CITROEN French Francs 175,000,000 9 1/2% Bonds due 1987

REPUBLIC OF ITALY ECU 500,000,000 10 1/2% Bonds due 1987

PRESIDENT BRAND GOLD MINING COMPANY LIMITED

Notice is given in terms of an Order of Court dated 31 December 1985, in the above matter, that the members of the above Applicant, President Brand Gold Mining Company Limited, are hereby summoned to attend a meeting...

WESTERN HOLDINGS LIMITED

Notice is given in terms of an Order of Court dated 31 December 1985, in the above matter, that the members of the above Applicant, Western Holdings Limited, are hereby summoned to attend a meeting...

FREE STATE GEDULD MINES LIMITED

Notice is given in terms of an Order of Court dated 31 December 1985, in the above matter, that the members of the above Applicant, Free State Geduld Mines Limited, are hereby summoned to attend a meeting...

PRESIDENT STEYN GOLD MINING COMPANY LIMITED

Notice is given in terms of an Order of Court dated 31 December 1985, in the above matter, that the members of the above Applicant, President Steyn Gold Mining Company Limited, are hereby summoned to attend a meeting...

FINANCE & PROVISION FUND

FINANCE & PROVISION FUND Council 12th July due for payment by 15th August 1986

Clubs

F.V.C. has notified the other members of a meeting to be held on Friday, 11 January 1986, at 7:30 pm...



# TECHNOLOGY

## Isotope enrichment on the boil

### David Fishlock reports on laser separation techniques using uranium vapour

PLANS FOR a new and highly adaptable source of commercial isotopes for industry and medicine are being hatched by a US Government laboratory in California. It believes it can turn a world lead in the laser enrichment of uranium and plutonium to advantage for other isotopes in short supply.

Dr Jim Davis, who leads the laser enrichment programme at Lawrence Livermore National Laboratory, takes the view that enrichment of almost any other isotope by his process will be easy compared with enriching uranium and plutonium. He is confident that the tunable laser systems with which he separates isotopes of these two metals can be returned to new wavelengths, once the uranium demonstrations move into the commercial phase.

High on his target list is mercury, the vapour of which

is used in the familiar fluorescent lamp. According to scientists with the US lighting company GTE Lighting, its lamps could be appreciably more efficient if only they could obtain commercially certain isotopes of mercury.

Other commercial possibilities lie with gadolinium, needed in nuclear fuel, and for a new medical test on bone tissue, but currently in very short supply.

A tunable technique for isotope enrichment could find many commercial outlets, and could offer a healthy competition to the main Western source of stable—non-radioactive—isotopes today, namely the US Government's Oak Ridge

National Laboratory in Tennessee.

Oak Ridge uses a large cyclotron "atom-smasher" known as the calutron to make a range of stable isotopes. But the process is painfully slow, and the price is high.

Mercury can be made in this way, starting with gold. The process stands alchemy—the quest to turn base metals into gold—on its head, and the cost is greater than the price of gold.

Dr Stuart Burgess, chief executive of Amersham International, buys stable isotopes from the calutron and from its equivalent in the USSR to use as targets for his own cyclotrons, for making radio-isotopes for medical diagnostics.

The tunable technology Lawrence Livermore developed was chosen earlier this year as the next commercial process to be used by the US Government for enriching uranium for nuclear fuel. A rigorous comparison with the big US gas centrifuges under development as the alternative technology had shown clearly that the laser process held greater economic promise.

Lawrence Livermore scientists have developed their technology since 1972, from ideas originally explored in Israel and in the Avco-Everett laboratories in the US.

Isotopes are atoms of the same atomic number and therefore the same chemical properties, but of different mass (atomic weight). Uranium, for example, is a mixture of three isotopes; mercury a mixture of seven. They can be separated with difficulty by amplifying their slight differences in physical properties.

The laser process favoured at present is called Avlis—Atomic Vapour Laser Isotope Separation. The first step is to boil the natural elements to provide a vapour on which the laser beams can go to work.

Avlis exposes this vapour of mixed isotopes to beams of coherent or "ordered" light, tuned to a highly specific wavelength (where ordinary light consists of many wavelengths). When the laser is tuned to the wavelength which excites a particular isotope, and the mixture is illuminated with its beam, the designated isotope is energised in a way that can distinguish it readily from the rest of the vapour.

In enriching uranium the aim is to ionise the uranium-235 isotope, which represents only about 0.7 per cent of the atoms



The 300-tonne separator used to demonstrate large-scale enrichment of uranium-235. Pictures courtesy of Lawrence Livermore National Laboratory.



Green and yellow light beams from copper-vapour lasers are the primary energy source for the Avlis process.

in natural uranium metal. The ionised atoms can then be drawn from the bulk of the vapour by electrically charged plates, and condensed as enriched uranium.

In fact, it requires irradiation of the vapour by four different wavelengths of visible laser light, to raise an atom of uranium-235 to a self-ionising state.

Lawrence Livermore's Avlis process uses dye lasers pumped by powerful copper-vapour lasers to generate each of these four wavelengths. The electrical efficiency of the lasers is high but they have other drawbacks which the scientists have reduced by clever optical engineering.

The result is a complex optical system comprising about 4,500 optics. Outputs from six copper-vapour lasers are multiplexed and delivered to the dye lasers at six times the pulse rate of a single laser.

At present the \$72m (£50m) laser demonstration facility built by Dr Jim Davis delivers more than 300w of laser power for enrichment. But his target is 1.5 kw by the end of next year, and 10 kw by 1988.

The laser demonstration facility is the precursor of a commercial uranium enrichment operation expected to cost about \$1bn, probably to be built at one of the present US enrichment factories. Dr Davis's task is to demonstrate a single module of the commercial-scale process, by 1987.

If he is successful, the

uranium process is expected to shift quickly into the commercial sector, to meet the demand for enriched nuclear fuel.

Britain's Atomic Weapons Research Establishment is showing interest in using Avlis to free plutonium-238 from other isotopes which interfere with its efficiency as a nuclear explosive.

According to Lawrence Livermore scientists, Avlis is a universal process for isotope separation, capable of being tuned to most elements and their isotopes. The existing laser system can in theory separate the isotopes of 45 elements.

By changing the orange-red dye laser light to its second, third or fourth harmonic, the rest of the periodic table can be tackled, they say.

up in 1981 to develop novel ideas on the basis of technologies licensed from other companies.

Many of the ideas that Prelude will take up should emanate from within Cambridge Consultants itself, Dr Auton says. He hopes his staff will come up with three ideas a year that Prelude will consider.

If they are worth investing in, then the employee will leave Cambridge Consultants to pursue a new career.

He said: "A certain amount of staff turnover is good for our business. If one of our employees is an entrepreneur and wants to start a new company, then we will help him to do it."

Equity Capital for Industry, a City-based financial group, and the pension funds of British Rail, British Gas and the water authorities.

Prelude has injected £250,000 into Qudos, a Cambridge venture set up to design specialised microchips. It is investing £360,000 in Linear Instruments, a small company based in Bishops Cleeve, Herts, which makes laser interferometry devices which measure distances highly accurately.

The final investment, of £250,000, is in a small concern

DECORATING ENTHUSIASTS may be able to design their own wallpapers using a computer screen at their local do-it-yourself stores, if an idea backed by Freinde Technology, a venture capital company in Cambridge, comes to fruition.

The idea encompasses a variant on ink-jet printing, in which ink is squirted at high pressure under electronic control at paper. The technique has become established in recent years in high-speed printers used in offices.

Prelude, set up nearly a year ago by Cambridge Consultants, a contract-research company in Cambridge, and a group of pension funds, is examining the possibility of mounting several hundred ink jets over a large

area.

The jets could be made to impregnate patterns on large areas of fabric, such as tiles and wallpapers.

In a wallpaper factory, a manufacturer could turn out large quantities of coated paper to the same specification. Technicians would switch on the ink-jet machine at the end of a long production run.

Under computer control, the hardware would produce a series of different patterns for specific quantities of paper.

In this way, the manufacturer

could reduce stocks. The company could turn out designs virtually to wholesalers' orders, rather than having huge amounts of wallpaper of different patterns sitting in warehouses.

In another possibility, the large ink-jet machines could be in shops. At the press of a few buttons, householders could decide on the patterns they want, instructing the equipment to print the design of their choice on the blank fabric.

The idea of the "multi-

array" ink-jet machines has been proposed by staff at Cambridge Consultants. Prelude is backing the development with an initial investment of £50,000.

Eventually, says Dr Bob Hook, Prelude's managing director, investment of up to £1.5m might be required. Some of this could come from industrial partners which want a stake in the new venture.

This development is one of four technical ideas that Prelude is backing. The partners in Prelude, which has a venture-capital fund of £5m, include

that plans to make health-care products. Prelude is keeping the details secret because it thinks the concern has a lead on competitors.

Cambridge Consultants decided to enter the venture capital business, says Dr Paul Auton, its managing director, to follow through with its general aims of attempting to introduce technical ideas into manufacturing industry. The company has a staff of 200, with annual sales of £6m.

Prelude grew out of Cambridge Enterprises, a subsidiary of Cambridge Consultants set

up in 1981 to develop novel ideas on the basis of technologies licensed from other companies.

Many of the ideas that Prelude will take up should emanate from within Cambridge Consultants itself, Dr Auton says. He hopes his staff will come up with three ideas a year that Prelude will consider.

If they are worth investing in, then the employee will leave Cambridge Consultants to pursue a new career.

He said: "A certain amount of staff turnover is good for our business. If one of our employees is an entrepreneur and wants to start a new company, then we will help him to do it."

Known as the Personal Engineer, the system includes a model AT machine with 512,000 bytes of memory, a 20 megabyte hard disk store, floppy disk and Computer-Vison's own graphics controller and colour display.

The system allows electronics engineers to undertake logic design and to originate, edit and plot symbols and schematics. With a hardware addition called Sim-board, circuit simulations can be carried out.

Personal Engineer is fully compatible with Computer-Vison's other systems, using appropriate interfaces the company will supply.

More on 0256 58132.

## 'Designer' wallpaper by computer



Now Thai can take you by DC-10 to the land of the Pharaohs. Our twice-weekly flights, via Muscat, depart from Bangkok every Tuesday and Friday at 2330. And fly out of Cairo to Bangkok each Wednesday and Saturday. So now you can visit one of the oldest civilizations on earth with one of the most civilized airlines in the sky.



**Design and Construct**

**Northwest Hoist**

### Electrical tester from Ferranti

FERRANTI is selling novel testing hardware to check on the electrical systems of cars. Austin Rover is installing the equipment, worth more than £500,000, on a production line at its Cowley factory.

Vehicles on the production track are provided with a bar code which details the type of electrical equipment fitted, lighting systems and ignition control for instance.

A bar code reader by the side of the production line obtains this information, which triggers a specific repertoire of electrical tests controlled by a microcomputer.

Results from the checks are fed back to the computer. An operator can monitor the results using a keyboard and display screen. General Automation, Siemens and Autotest competed with Ferranti for the contract with Austin Rover.

### Design package for PC-AT

IN COMMON with many other companies in the computer aided design business, Computer-Vison, one of the market leaders, has produced an electronic design hardware/software package based on the IBM PC-AT personal computer.

Known as the Personal Engineer, the system includes a model AT machine with 512,000 bytes of memory, a 20 megabyte hard disk store, floppy disk and Computer-Vison's own graphics controller and colour display.

The system allows electronics engineers to undertake logic design and to originate, edit and plot symbols and schematics. With a hardware addition called Sim-board, circuit simulations can be carried out.

Personal Engineer is fully compatible with Computer-Vison's other systems, using appropriate interfaces the company will supply.

More on 0256 58132.



THE MANAGEMENT PAGE

EDITED BY CHRISTOPHER LORENZ

LORD LEVERHULME, one of the ancestors of the Unilever empire, was a great advocate and practitioner of advertising. Yet he is credited with the legendary statement that half of the money he spent on it was wasted—he just didn't know which half.

Measuring success

Takeovers: at best an each way bet

BY CHRISTOPHER LORENZ



Few takeover advocates, and even fewer of this winter's mega-bid practitioners, would be rash enough to admit that a similar maxim applies to mergers and acquisitions. Yet nearly 30 years of intense research on both sides of the Atlantic has produced a consensus view among academics that, on average, takeovers are at best an each-way bet.

research should also weigh heavily in the judgment of whether a particular bid (at a particular price) is likely to produce the promised pay-off. Since the late 1960s, when conglomerates began to fall into disrepute, it has been thought that the "relatedness" of a victim's business with that of the acquirer was a prime success factor: the more related, the better. But, at least for certain industries, this "rule" has now been heavily qualified, if not discredited.

Given all the difficult methodological problems involved—the least of which is the definition of "success"—it is remarkable that there is any measure of agreement about the hit rate of acquisitions, let alone about the whys and wherefores. The subject has been researched at length by hordes of academics from a wide range of disciplines whose only common characteristic is a ferocious distrust of each other's methods.

The degree of consensus between them does not extend far beyond the 50-50 guideline. The majority agree that the victim's shareholders usually benefit far more from takeover than do the acquirer's, but on almost all other counts the studies are out of line. Time and time again, their proponents claim to conclusively run up against whether the myriad of necessary adjustments and interpretations have been made correctly. Acquisition analysis is very much more of an art than a science.

There are four basic "schools" of studies: accounting, economic, financial and managerial. The first two have produced the most negative findings, while much of the straight research plumbs the managerial studies have been less concerned with aggregate findings than with detecting the types of takeover most likely to succeed or fail.

years after the takeover. Such studies are particularly fraught with problems, ranging from the difficulty of detecting the impact of a small victim on the performance of a large acquirer, to all sorts of other accounting, indentation and risk-adjustment issues. They have not been popular in the US.

● Economic. One of the most recent UK economic studies (Cowling et al\*) failed to find any evidence that a series of big mergers in the late 1960s had, by the mid-1970s, produced significant efficiency gains relative to non-merging competitors. "In many cases efficiency has not improved; in some cases it has declined," the report concluded. But it did find that market power had increased in most cases.

● Financial. This is by far the largest body of work. Most of it consists of "event studies" covering eight years or more of share price changes in the few weeks or months around the time of takeover. The majority finding is that the victim's shareholders gain substantially in percentage terms; bid premiums have fluctuated between an average of 20 and 40 per cent, and are currently rising, especially in the US. Until the recent spate of US

cases where the acquirer's share price had immediately suffered from the bid, the predator's shareholders were usually shown as having either gained very slightly or, on average, not just. Calculated in cash terms, in order to iron-out discrepancies in the relative size of predator and victim, some studies have shown equal short-term returns going to both sides.

Before the eruption of Wall Street's current worries, several longer-term studies had shown that, in the three to five years after takeover, acquirers' share prices had not, on average, shown any "abnormal" deviation from the market as a whole. Roughly half the acquirers had outperformed the market, and half had underperformed it. This was taken as implying that, through the stock market's eyes, half the takeovers were successes and half were failures.

But a number of recent studies in the US and UK, some of which reach back as far as the 1960s, show evidence of systematic falls in acquirers' share prices within a year after takeover. Michael Jensen and Richard Ruback, two of America's most experienced

managers of the companies whose share prices are in question, but also in the academic world itself. A common allegation, for example by Cowling, is that share valuations tend to fluctuate far more violently than is justified by changes in the underlying asset values.

Yet modern financial theory, backed by extensive empirical testing, suggests that stock markets are indeed broadly, if not perfectly, efficient. In the words of Professor Paul Marsh of the London Business School, "share prices are the only market price available. They do look very far forward—if they did not, the market would systematically get prices wrong. All the evidence on share price behaviour indicates that it does not."

● Managerial. The most influential studies were conducted over 12 years ago by John Kitching. Surveying mergers throughout Europe, he concluded (again) that about half were successful, a fifth were "not worth doing," and the rest were failures. He reported that the results of an acquisition do not become apparent until at least two years after it takes place. And he produced a set of findings on the benefits of "relatedness" which anticipated a whole generation of broader American diversification studies.

Two of his main findings were that the less related the acquisition, the more risky it was; and that it was more risky to move into new markets than into new technology (provided that both were not done together).

Since 1973, however, the relatedness rules have been challenged on the grounds that the high profitability of companies with related businesses had less to do with the general principle of relatedness itself than with the fact that most "related" companies have tended to be in attractive industries. In one sense, this is perfectly obvious. But it alters the prescription for successful takeovers; what appeared to be a general rule for all acquisitions now only applies to some of them, it seems.

"The concept of relatedness doesn't help companies in steel, paper or textiles, yet they're the very companies which most need to diversify," says Profes-

sor Philippe Haspeslagh of Insead, the French business school. Academics and consultants were now searching for new categories of "relatedness" which explain the success of companies such as Hanson Trust in making acquisitions which under the old definitions would have been classified in the discredited "conglomerate" category.

Management abstracts

Decreasing computer downtime. T. M. Ross in *Journal of Information and Image Management* (US), June 85 (23 pages). Offers a string of suggestions on how to decrease the downtime of computer systems, from hiring full-time service engineers to covering machines with dust cloths when not in use.

Overtime work and industrial accidents. M. Schuster & S. Rhodes in *Industrial Relations* (US), Spring 85 (123 pages). Reviews literature on industrial accident behaviour; reports the results of research from three manufacturing organisations which supports the hypothesis that overtime is related to accident incidence, and overtime worked on consecutive days causes greater accident severity (in terms of work days lost).

Careers in industry and other alternatives. T. Perry in *Business Horizons* (US), July/August 85 (8 pages). Argues that companies in decline which are contemplating employee cutbacks, lay-offs or redundancies should consider alternatives—such as job sharing, pay cuts/freeses, early retirement—and encourage greater employee participation in deciding which alternative(s) to adopt. Looks particularly at the difficulties faced by employees with company/industry-specific skills, who have greater wishes to remain and are therefore "exploitable."

Making employees feel part of the company. C. Adams in *Accountancy* (UK), September 85 (14 pages). Advocates greater use of share option schemes to motivate employees to work for company growth; examines the characteristics and advantages of fixed value and floating-value employee share schemes. How to improve staff presentations. R. Wiegand in *Business Horizons* (US), July/August 1985 (7 pages). Looks into the reasons some speakers at presentations can be... simply dire; gives hints on how to improve presentational skills. These abstracts are condensed from the abstracting journals published by Anbar Management Publications. Licensed copies of the original articles may be obtained at a cost of £4 each (including VAT and p+p; cash with order) from Anbar, PO Box 23, Wembley HA9 8DJ.

NOTICE OF REDEMPTION

Chrysler Overseas Capital Corporation and Chrysler Corporation, Guarantor

5% Guaranteed Convertible Sinking Fund Debentures due 1988

NOTICE IS HEREBY GIVEN that, pursuant to the provisions of the Indenture Dated as of February 1, 1968 among Chrysler Overseas Capital Corporation and J. Henry Schroder Bank & Trust Company, as Successor Trustee, \$3,116,000 in aggregate principal amount of the above captioned Debentures will be redeemed through operation of the Sinking Fund on February 1, 1986 (the Redemption Date) at 100% of the principal amount thereof (the Redemption Price) together with accrued interest to said Redemption Date.

The serial numbers of the coupon Debentures to be redeemed are set forth below in groups from one number to another number inclusive.

Table with 6 columns of serial numbers for coupon debentures, ranging from 34160 through 174 to 50022 through 50080.

Interest on said Debentures to be redeemed shall cease to accrue on and after the Redemption Date and on said date the Redemption Price will become due and payable on each of the Debentures called for redemption.

Payment of the Debentures to be redeemed will be made upon presentation and surrender thereof, together with all coupons appertaining thereto maturing subsequent to the Redemption Date, at J. Henry Schroder Bank & Trust Company, One State Street, New York, New York 10015, 6th Floor, Corporate Trust Department or at the option of the holder at the offices listed below:

- List of banks and financial institutions: Deutsche Bank, A.G.; Banque Internationale de Luxembourg S.A.; Société Générale de Banque; S.G. Warburg & Co. Ltd; Algemene Bank Nederland N.V.; Banca Commerciale Italiana; Banque de l'Union Européenne Industrielle et Financière.

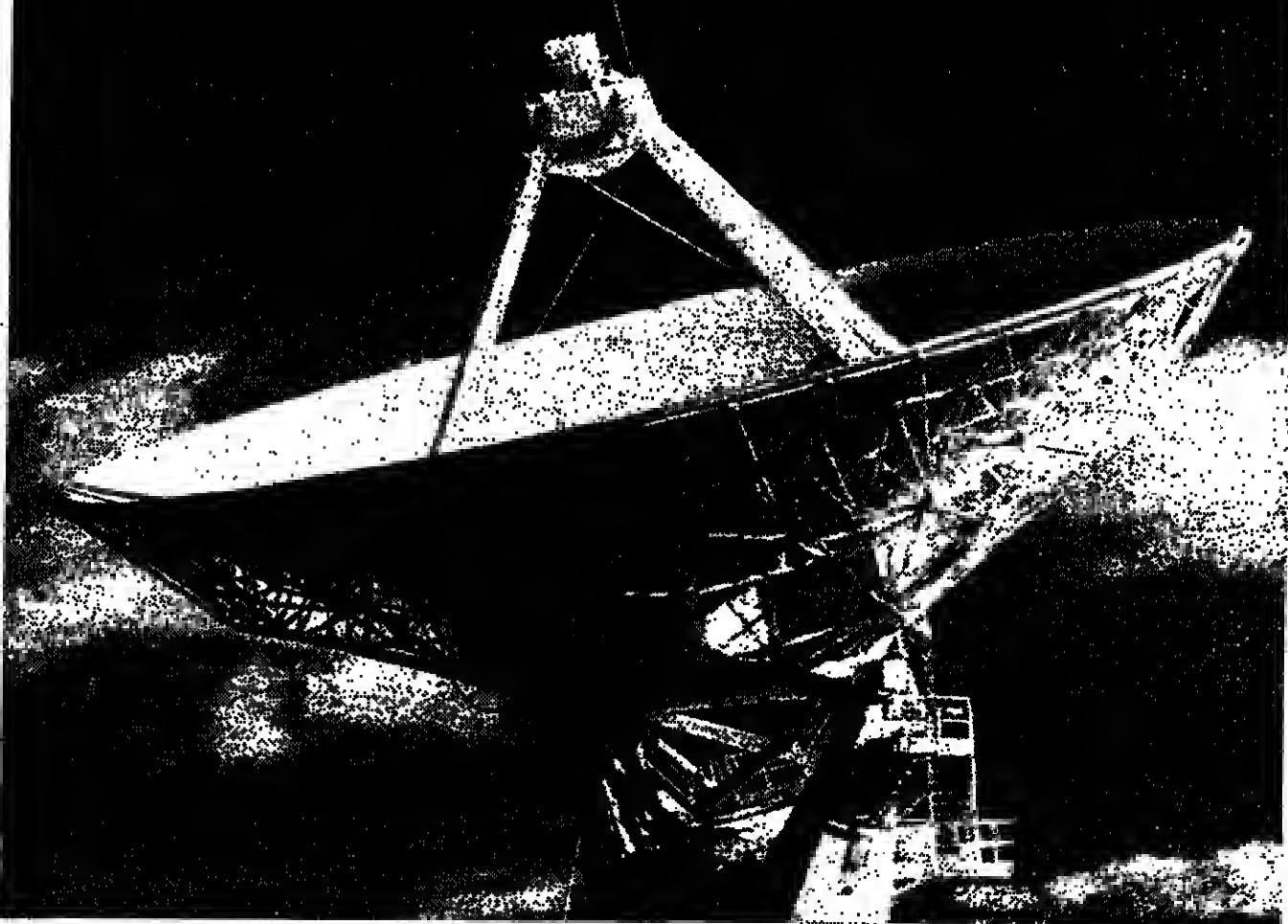
Coupons which shall mature on or before said Redemption Date should be detached and surrendered for payment in the usual manner. Debentures may be converted at the option of the holder thereof into Common Stock of the Guarantor at the price of \$42.46 per share. The right to convert Debentures selected for redemption into Common Stock will terminate on February 1, 1986, in accordance with the Indenture under which the Debentures were issued.

Chrysler Overseas Capital Corporation By: J. Henry Schroder Bank & Trust Company, As Successor Trustee

Dated: December 31, 1985

Under the Interest and Dividend Tax Compliance Act of 1983, we may be required to withhold 20% of any gross payments made within the United States to certain holders who fail to provide us with, and certify under penalties of perjury, a correct taxpayer identifying number (employer identification number or social security number, as appropriate) or an exemption certificate on or before the date the securities are presented for payment.

In Virginia We Found A Way To Bring You Today's News From Outer Space.



Nearly three million readers reach for *The New York Times* every day to find out what's going on in the world. That makes it one of America's largest selling newspapers.

Few of its readers realize, however, that a small company in Virginia plays a major role in helping the paper get the latest news into the hands of its readers.

*The Times* has a state-of-the-art printing set up which has been fundamental to its growth and success. The national edition is put together each day in New York City. Then, thanks to a high speed laser scanner designed in Virginia by Crosfield Data Systems Inc. (formerly known as LogEscan Systems Inc.), each page is transmitted to a satellite 22,300 miles above the earth and the information is then beamed to printing plants in five states across the nation.

But this is only one of Virginia's success stories in the rapidly growing field of communications.

What makes it such a good place for these companies? Virginia has one of the best educated work forces in the country. It's a right-to-work state. And so well managed, it has earned a AAA bond rating.

If this sounds good to you, contact Denis Rufin, Director for Europe, Virginia Department of Economic Development, 479 Avenue Louise, BTE 55, B-1050, Brussels, Belgium. Telephone: 648-6179. Telex: 26695.

Virginia We're Doing Some Of America's Most Exciting Work.

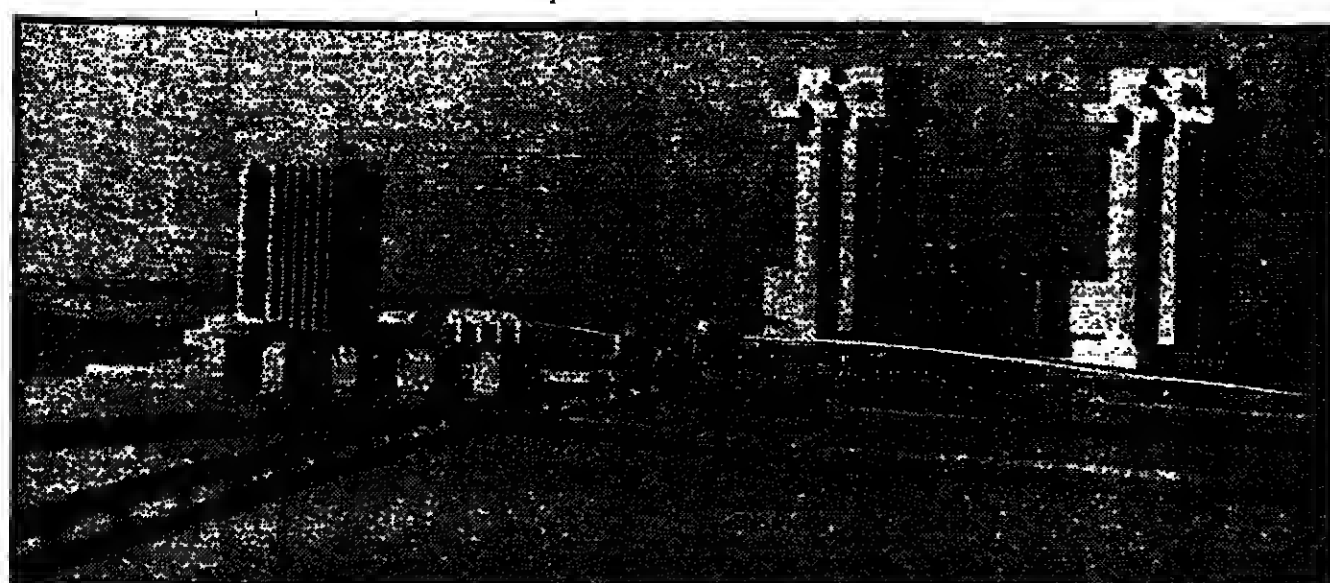


THE ARTS

Architecture  
Colin Amery

Chance to change London's working life

It has taken an inordinately long time for the potential of London's Docklands to be realised; indeed, the real value of the area for London and the South East has still not been grasped imaginatively. Only the advent of the large-scale American plans for Canary Wharf on the Isle of Dogs seems to have woken everyone up to the fact that this could be the natural place for the extension and reordering of much of London's working life.



Model of the Thames Market Centre, proposed for a key Docklands site

You can tell that something real is happening there when you hear, as I did in the Guildhall the other day, the London Docklands Development Corporation being referred to as "the enemy" of the City. This is a depressing reaction to the future—no plan for the City of London can afford to be as insular as it continues to act as though Dockland does not exist.

As Canary Wharf, under the stern hand of its promoter Mr G. Ware Travelstead, waits for the mandates of the Royal Fine Art Commission and the passage of a Parliamentary Bill to extend the railway, another large and fascinating scheme is awaiting the pleasure of the LDDC.

The Thames Market Centre is proposed for a key site situated between the Isle of Dogs and the City STOL Airport to be built in the Royal Dock. The intention is to provide a centre for permanent displays of international traders. The architectural concept (by the Sir Basil Spence Partnership) allows for a group of pavilions, each allocated to a trading nation or group of nations.

be in the region of 575m—parking alone has to cater for some 4,000 cars. At present the Brunswick power station, redundant since 1984 and to be demolished, gives the area an architectural scale, as did the Bank/Howle sites which recently disappeared. One of Dockland's problems has always been its inability to plan convincingly at a scale that suits the majesty of the river and the drama of the wide open spaces. Architecturally, this plan has some of the right scale. It is too early to see what it may look like in detail, but the towering gateway to East London is surely appropriate.

The Thames Market Centre is seen by the development consortium backed by financial interest New Baltic plc) as a crucial trade centre for the whole EEC. It is amazing to think that this sort of potential is only two miles from the City. Canary Wharf, this trading centre and many other schemes all depend upon each other and on new communications. It is time that a rational plan for Docklands and the City is creatively discussed by both the LDDC and the City—London cannot afford retrograde piecemeal planning any longer.

Obituary/Christopher Isherwood

Anthony Curtis

The novelist Christopher Isherwood, who died at the age of 51 at the weekend in Santa Monica, California, where he had lived for many years, had the good fortune as a young writer to create one character on whom it is an exaggeration to say he was able to live for the rest of his life.

This was Sally Bowles, who appeared originally in a long story, bearing her name, published in the Hogarth Press before the Second World War. It was then added to a group of kindred stories under the title *Goodbye to Berlin* (1939).

while contemplated becoming a monk. But although deeply committed to his newly found religion, studying and translating the Gita, he continued to write fiction and worked as a script-writer in Hollywood. It was here that Isherwood met the other British exile, the playwright John Van Druten who turned Sally Bowles and some of the other Berlin material into a play *I Am a Camera* (1951). The title is taken from a sentence explanatory of Isherwood's approach to writing.

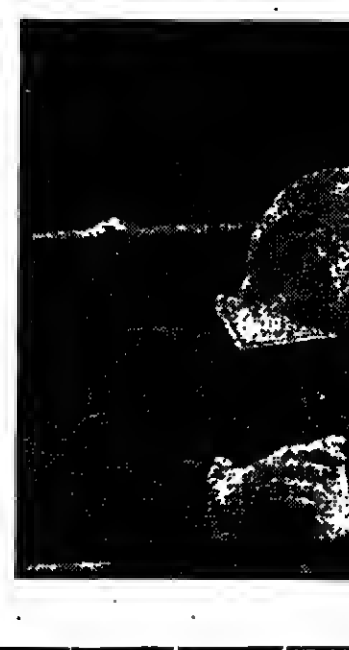
The Mastersingers/Coliseum

Andrew Clements

The first return to the repertory of English National Opera's 1984 staging of *The Mastersingers* on Saturday can be welcomed with only a few qualifications. This revival has had its difficulties. Originally it was to have been conducted by Charles Mackerras and the role of Hans Sachs taken by Gwynne Howell, but both dropped out at an early stage.

ing, sometimes the more cautious voices in ensembles are unavoidably overpowered. But many passages are handled with intelligent expressiveness; an occasional lack of grandeur, perhaps most noticeable in the closing minutes of the opera, might well be remedied later.

As Sachs, Norman Bailey's introduction to the cast, while continuously absorbing and watchable on its own terms, is not totally convincing in the context of this production style. If the overall approach generally seems to be on the detached side, without the broad-brush bonhomie that characterises many productions of this opera, Bailey's outward-going stagecraft, his ability to fix an audience's attention upon his character with the simplest gesture, sometimes seems to contradict it.



Alan Opie and Sean Rea

Arts news in brief

The National Theatre is to present the British premiere of Neil Simon's *Brighton Beach Memoirs* in the Lyttelton on February 12. The cast includes Frances de la Tour, Robert Glenister and Stephen Mackintosh.

David Mamet's *American Buffalo*, first seen in this country at the National Theatre and later in a West End production starring Al Pacino, returns to London in a revival directed by Robert Walker of the Old Red Lion, ECL, on January 14.

Scottish Opera is to present a new production of Verdi's *Il trovatore* at the Theatre Royal, Glasgow, on January 22. This co-production with Opera North is to be seen in André Schifano's Spanish civil war version, directed by Graham Vick, conducted by Graeme Jenkins and designed by Michael Yeargen.

Nicholas Nickleby/Stratford-upon-Avon

Charlotte Kentley

There is no doubt that the RSC's inspiring and inspiring production of *Nicholas Nickleby* is a landmark in British theatre of the 1980s. The revival production at Stratford provides there is no doubt that David Edgar's adaptation works, but how?

The two parts total eight and a half hours but never fail to engross. Third-person narrative enables Edgar to edit and accelerate the mammoth plot by conveying some scenes in one sentence, as if aside. Part One introduces the characters, eccentricity and extremes of Dickens' 19th-century England; Part Two is mere soul-searching.

Ralph Nickleby in his grand profile yet, internally, a complex motivation of greed. David Collings, for a subtle Newman Noggs; vacillating, clicking his fingerbones yet stumbling into virtue. Michael Siberry, for a Nicholas Nickleby sympathetic but not wet, whose reluctance to strike Squeers (despite audience egging him on) conveys both physical hesitancy and moral certainty.

Trevor Nunn and John Caird direct with a spatial sense which extends into the auditorium via catwalks at several tableaux to evoke London street life or Dotheboy's Hall, then to focus in on still moments of intimacy such as between Smike and Nicholas. Scenes of great sorrow and great joy are juxtaposed to the enhancement of both, with conviction but no melodrama, because they have created a stage reality, an expressionist landscape of the imagination where walls may be constructed from human faces.

Above all, John Lynch's extraordinary physical performance as Smike, mourning from the shadows more Cruikshank than human, crippled limbs hanging like a puppet whose strings have been hopelessly tangled and cut. He is the emaciated embodiment of spiritual deprivation which is the heart of Dickens' novel, and simultaneously the symbol of hope for the future because he bears no bitterness, only love.

The RSC pushed the novel into the 1980s with the final gesture: domestic bliss ensured for all worthy protagonists. Nicholas picks up the next Smike in his arms and offers him, not to his family, but to us the audience. Here is the cyclical horror of man's cruelty and the responsibility was not in a happy ending, but with us.

The ultimate accolade must go to the actors. It is unfair to single out individuals from an ensemble who treble parts with such gusto and you will find your own favourites, but here are mine. Alison Rose and Jane Carr for ingenious character changes, especially convincing as a pristine and needle-sharp Tilda and a spluttering, scheming, infantile Fanny Squeers respectively. John Carlisle, expressing the ruthlessness of

Adelaide Festival 1986  
The 14th biennial Adelaide Festival is to be held between March 1 and 23 and features the world premiere of Richard Maltby's opera *Voss*, after the Patrick White novel; the RSC's *Theatre of Georgia* in *The Caucasian Chalk Circle* and *Richard III*; the Netherlands *Dans Theater*; Jan Fabre's *The Power of Theatrical Madness*; the Philip Glass Ensemble and Laurie Anderson from New York; and the Opera Factory

Eurich in a new performing version of Gluck's two *Iphigenia* operas.  
The Footsore Travelling Theatre, based in the South West, will represent Britain with a world premiere of a new production of *Macbeth*. Writers attending the first week international forum include Fleur Adcock, Marie Vargus Llosa, Craig Raine, Josef Svoboda and Graham Swift.

Giselle/Covent Garden

Clement Crisp

Latest of the Royal Ballet's debutants in Ravenna Tucker, who made her first appearance in the role on Friday night, in beautiful quietness and means grace of technique, this was a memorable performance, a bright enquiry for the future. The Giselle we first see is a tender girl moving with dulcet ease, emotions under-released but containing. Her mad-scenes rise but rarely above a mezzoforte of emotion, save for the sudden and shocking outburst as Giselle stabs herself, a moment driven, like the sword itself, into the heart of the action.

for Albrecht. Rare among the company's Giselles, Miss Tucker can convey both the richness of the dance—leaps exquisitely poised so that she seems to bounce upon a step from below, line stretching in floating, unforced arabesques; elevation that helps her drift over the stage like the night mist—and the emotional purpose behind it, the dramatic as light and true as the dance.

There are dance sequences which experience will enable Miss Tucker to polish and sharpen in dramatic impact. A mere immediate problem with so restrained a reading—albeit one entirely in harmony with this artist's stage personality—is that supporting performances, and the orchestral accompaniment, must avoid lethargy in an attempt to complement the ballerina's style. There were passages when it seemed that the production was doing well, and that the cast were dreaming unawares that they were appearing in *Giselle*. (The Courland court hunt is part of some other staging's nightmare.) Julie Wood, though, was a Bertha of real sincerity and sensibility in her concern for Giselle, dramatically cogent at all times.

The Albrecht was Jay Jolley, also making his debut. He provided sterling support as a partner and a well-managed account of a role which he plays without fuss. A young Myrthe also took the stage on Friday night. Tracey Brown appeared as the wily Queen in the Royal Ballet School performance in 1982, impressing us then with her strong presence. She now offers a portrait even more commanding, with implacable gaze and no less implacable gesture. Allied to this, a broad range of highly focused moments—rings of *spoules* and rippling *pas de bourrée* mark her as a notable newcomer, having the technical abilities and the force of temperament both so vital to the drama of the second act.

Arts Guide

Music/Monday, Opera and Ballet/Tuesday, Theatre/Wednesday, Exhibitions/Thursday, A selective guide to all the Arts appears each Friday.

Music

VIENNA

Alexis Weissenberg, piano. Bach, Mendelssohn (8.30-9.00).  
Haydn's "Die Schöpfung": Lower Austrian Chamber Orchestra conducted by Christophers with Cheryl Studer, soprano; Anthony Rolfe-Johnson, tenor; Helmut Berger-Tuma, baritone; Musikverein (Sun Mar 7.30).

Vienna Symphony Orchestra Youth Concert conducted by Riccardo Chailly with Rado Lupu, piano. Brahms, Tchaikovsky, Musikverein. (Thu).

NETHERLANDS  
Utrecht, Muziekcentrum Vredenburg. Recital Hall. Hanne Nakaajima, piano. Franck (Thu). (21.45-44).

Rotterdam, De Doelen. Harriet Haenchen conducting the Rotterdam Philharmonic with Peter Zazulsky, violin. Bartók, Schubert (14.30-11).

The Hague, Nieuwe Kerk. Rossini's *Pette Messa* solemnly performed by the Netherlands Chamber Choir conducted by Jos van Immerseel. (Thu) (20.00-22.15).

ITALY  
Milan: Teatro alla Scala: Margaret Price, soprano, accompanied by Geoffrey Parsons in music by Beethoven, Brahms, Strauss and Mahler on Monday (20.15-22).

LONDON

1981 Young Artists and 20th century music series at the Purcell Room; two concerts nightly 8.00 and 7.30 Monday to Friday. (22.31-1).

Peter Frankl, piano; György Pauk, violin; Ralph Kirshbaum, cello. Second Beethoven Trio concert in the cycle. Elizabeth Hall (Thu). (22.31-1).

Joseph Feghall, piano: 1983 Van Cliburn Piano Competition winner plays Haydn, Villa-Lobos, Chopin, Schumann. Elizabeth Hall (Wed). (22.31-1).

London Symphony Orchestra, Howard Shelly conducting/piano, Jack Seymour, clarinet. Handel, Mozart, Bartók. Elizabeth Hall (Wed). (22.31-1).

London Symphony Orchestra, conductor Günther Herbig, Sergei Edelmann, piano, Weber, Beethoven, Brahms. Barbican Hall (Thu). (22.31-1).

NEW YORK  
New York Philharmonic (Avery Fisher Hall) Klaus Tennstedt conducting; Ute Venzing, soprano. Al-Wagwan

WASHINGTON

programme (Tue): Klaus Tennstedt conducting. Mozart, Beethoven (Thu). Lincoln Center (21.42-43).

National Symphony (Concert Hall): Rafael Frubeck de Burgos conducting. Fauré, Bruckner (Thu). Kennedy Center (25.43-77).

CHICAGO  
Chicago Symphony (Orchestra Hall): Raymond Leppard conducting. Anthony and Joseph Faravato duo piano. Chabrier, Bartók, Bizet. (Thu). (4.55-12.2).

PARIS  
Paul Tortelier, cello; Ensemble Instrumental Andolt: Vivaldi, Lelega, Boccherini (8.30pm). Siegfried Jerusalem, tenor. Siegfried Messner, piano. Schubert's Die Winterreise (8.30pm) Both concerts Mon, TMR. Châtelet. (42.33-44.4).

Orchestre National de France conducted by Vladimir Fedoseyev with the Radio France Choir: Rimsky-Korsakov's *Shegavuzhka* (Tue) Salle Pleyel. (4.51-6.30).

Tanel, piano: Bartók (Tue) Salle Gaveau (4.53-20.30).

Ensemble Orchestral de Paris—Jean-François Walter, violin; Pierre Barillet, piano; Beethoven's violin and piano sonatas intégrale (Thu) Salle Gaveau (4.53-20.30).

London orchestras  
Era ends on high note

The London Orchestral Concert Board disappears on April 1, an innocent victim of the abolition of the GLC. For almost 20 years it has subsidised orchestral concerts in London (mainly at the Festival Hall) by the big four orchestras, the LSO, RPO, LPO, and Philharmonia, along with dozens of smaller musical fry like the London Sinfonietta and the English Chamber Orchestra.

72 per cent capacity); the LPO were up 8 per cent of 69 per cent for 25 concerts; the RPO managed a jump of 11 per cent to 77 per cent for its 34 concerts, while the most average Festival Hall visitor, the Philharmonia, with 44 performances, saw a slight drop to 75 per cent from 80 per cent in 1983-84.

Nothing much will change in the immediate future. Because soloists and conductors are booked years in advance the Arts Council has notified the orchestras that the traditional rhythm of musical life in London will be financed as usual up to the spring of 1987.

Obviously the Arts Council will be able to exercise more control over the orchestras when it becomes their sole patron, although of all our national arts institutions the orchestras are the least dependent on subsidy—on average it accounts for between 12 and 15 per cent of their revenue.

Whatever the reason, in 1984-1985 the 10 South Bank concerts by the LSO had an average capacity of 86 per cent (and 82 concerts at the Barbican a

Antony Thorncroft

Salomon Brothers Inc is pleased to announce the opening of its Zurich Office  
Stadelhoferstrasse 22  
8024 Zurich, Switzerland  
Telephone (01)251-5137 Telex 816755  
George P. Hutchinson  
Managing Director  
Salomon Brothers Inc



**FINANCIAL TIMES**

BRACKEN HOUSE, CANNON STREET, LONDON EC4A 4BY  
 Telegrams: Finantimo, London PS4. Telex: 8954871  
 Telephone: 01-248 8000

Monday January 6 1986

**Pillar of the Bonn state**

WEST GERMAN social democracy has taken an important step to distance itself from some of the more worrying positions of the Greens and of the peace movement. There is nothing unusual about socialist parties abandoning more extreme positions while in power. But in Germany (as in Britain, though in a different context) it is already happening while the socialists are in opposition and preparing for a year of political tussles that will lead to a general election no later than March 1987.

Mr Johannes Rau, the Social Democrats' newly installed champion who will try to unhorse the Christian Democratic Chancellor, Dr Helmut Kohl, opened his bid for the middle-of-the-road vote in his policy speech at Berlin before that party's annual congress in Bonn last week. Mr Rau's rise to national prominence began with a comfortable election victory in his home state of North-Rhine Westphalia last summer. He had acquired the reputation of being a sound father to his people without a great deal of ideological baggage, a "nice guy" who could heal the breaches within his own party and would appeal to a not excessively politicised electorate. That is his attraction, but also constitutes a danger.

In the months between his election success in North-Rhine Westphalia in May and the Ahlen speech, Mr Rau repeatedly betrayed his inexperience in defence and other external matters. The message from Ahlen was a deal clearer, but Mr Rau himself must know best that the battle for the centre has yet to be fought.

That is truer since, after a brief hiatus, the Government in Bonn is doing well. A series of embarrassing fiascos seems to have come to an end and, most important, the economy is looking good and strong for next year.

Mr Rau will have to show that he can heal the breaches within his party. A vocal faction is critical of NATO and, especially, of its nuclear policy. Even Mr Brandt has at times sounded ambiguous on some sensitive matters, but is said to have undertaken to protect Mr Rau's bid by avoiding any mention of the NATO nuclear do not even wish to be pillars of the state, became a political factor to be reckoned with. In the SPD itself opposition grew to nuclear power and nuclear armament.

Mr Brandt, the party leader,

occasionally flirted with "green" views, afraid that the Greens might draw voters from the SPD, or hoping that a "red-green" coalition might one day bring the SPD back to power. This year an SPD group broke a NATO taboo by proposing jointly with the East German Socialist Unity Party a treaty for a zone in Europe to be free of chemical weapons.

The reaction associated with Mr Rau implies a recognition that the SPD cannot prosper without occupying the political centre rather than the left. This view is reinforced by the likelihood that the Greens have passed the peak of their first successes and look hopelessly divided.

US and UK institutions, faced by domestic markets which have been generally more hesitant, have been expanding their overseas portfolios and there has also been more cross-border investment within Europe. In West Germany, the largest continental market where prices have risen more than 65 per cent, as measured by 70 international's index.

The trend is part of a globalisation of equity markets which has quickened markedly during the year. Increasingly, shares are being offered to investors outside their country of origin, and are traded by the biggest securities houses around the world in a 24-hour market.

At the same time, financial assets such as shares and bonds have become more attractive investments because the policies of industrialised countries since the late 1970s have largely squeezed inflation out of their economies, with the result that real returns are less likely to be eroded.

The 1980s will probably be characterised as the decade of securities, whereas the 1970s would probably be called the decade of raw materials in view of their sharp increase in value, and the 1960s the decade of labour," wrote Mr Henri Meier, a management board member of Handelsbank, a National Westminster Bank subsidiary, in an introduction to a new handbook entitled "The Swiss Equity Market".

The shift to free-market economic policies, epitomised by President Ronald Reagan and Mrs Margaret Thatcher, has produced greater confidence in financial instruments. The recent Reagan/Gorbachev summit also helped to bolster belief that the political backdrop for the markets is encouraging.

Most of the investment money has gone into US markets, continuing a long Reagan rally. But fears that the Reagan economic boom may be running out of steam have made foreign markets more attractive and encouraged further diversification of US portfolios.

Overseas investment still represents a tiny proportion—perhaps one-fortieth—of the \$1,000bn or so available to be invested by U.S. pension funds. But the dollar's fall after a

period of exceptional strength has led more US investors, most of whom have long adopted an insular approach, to look across the oceans. Since Japan has seemed a less attractive investment than previously, the emphasis has been on Europe.

The Continent has reaped much of the benefit because its countries are generally seen as offering less economic and political uncertainty than Britain, which is heavily dependent for the success of its economic policies on oil prices and the pound.

While most countries would gain from lower oil prices, Britain—at least in the short term—stands to lose. London's most recent rally has been fuelled by takeover speculation, not thought to be a sign of fundamental strength, and by the strong cash position of institutional investors because of lower government debt sales and a hiatus in new share issues.

A powerful incentive for US fund managers to step up their international investment lay in the good performance of those funds which bought into foreign markets, like Japan. With many companies there perceived as already having experienced their period of sharpest growth, and with the competitiveness of exports now threatened by a strengthening yen, Japan has turned into a difficult market. So the emphasis has switched to Europe.

Fund managers' performance is usually measured against the key index for the market in which they invest. For international equities, the benchmark is the Europe and Far East Index compiled by Capital International. To outperform any index, managers must take investment decisions which make their portfolio diverge from the weights within it, which are determined by the relative size of individual stock markets.

This year, according to Frank Russell, a US pension fund consultant, managers have substantially "over-weighted" Europe and "under-weighted" Japan.

Putnam International Advisors, the London-based arm of the Boston advisory group Putnam Companies, nearly doubled the group's international portfolio last year to \$1bn, says Mr Schaefer, a managing director.

About 70 per cent of the increase came from appreciation of investments. The remaining 30 per cent reflected additional money entrusted to Putnam's management by funds either newly awake to the gains to be made abroad, or wishing to increase their international exposure. The total is still small by comparison with the \$18bn invested by Putnam's overall management.

According to InterSee Research, a Stamford, Connecticut-based consultancy, US pension

**Trial in the home market**

THERE IS now an unusually close consensus among economic forecasters of different schools about the short-term outlook for the UK economy. Growth will be somewhere near 3 per cent, sustaining a steady progress from the trough of 1980. Oil is topping out, so manufacturing and services will make most of the running, while on the demand side the recent surge in exports and investment is over, and consumer demand will be the main bullish factor.

When forecasters look beyond 1986, however, an enormous gulf opens up. On one side the market economists see 1986 as a year in which the economy is returning towards a more normal balance, with the components of demand growing broadly at much the same rate while the fact of continued growth should consolidate the recovery in business confidence of the past two years.

The Government, on the other hand, argue that a recovery fuelled almost entirely by what are generally agreed to be excessive wage increases must peter out quite quickly, so that by 1987 the economy will be slowed sharply by falling demand, and hampered by reduced competitiveness. Some are so persuaded by this gloomy projection that they are convinced Mrs Thatcher will contrive some excuse to go to the country this year, while the economic wind remains favourable.

**Contrast**

The gloomy view cannot be characterised simply as left-wing. German commentators, for example, show great relish at the moment in contrasting the unsustainable Anglo-Saxon recovery, based both in Britain and the US on excessive credit and monetary growth, reflected in historically high interest rates, with the virtuous German path of consumer restraint, modest credit demand, and a strong foreign surplus, promising indefinite crisis-free progress.

This analysis may appeal to those with mercantilist or Puritan instincts (distrust of the candy-floss society has a very long history), but it is not logical. The world as a whole cannot achieve a current

account surplus, and indeed it is the export-dependent economies—Germany, Japan and South-East Asia—which have the poorest outlook this year, as the US struggles towards a better balance.

The real challenges to the UK economy have little to do with the structure of demand, but everything to do with competitiveness, in its broadest sense. This involves not only the level of costs, but the design and marketing of products. Consumer-led growth means that this test must be faced not just by any number of gloomy forecasts, but by the quality of the goods and services which the UK exports last year, but by the general quality of what the UK has done so poorly in defending their own share of their home markets.

The industrial lobby has argued down the years that a sound home market is the foundation of prosperity. This is probably much truer in these days of volatile exchange rates and unpredictable returns from exporting than it was in the past.

**Wage costs**

Most comment on competitiveness dwells almost entirely on wage costs, where the published figures provide a text for any number of gloomy sermons. There is much doubt, though, whether the figures are reliable. The earnings statistics appear to be accurate, but the figures for output have shown a consistently gloomy bias over the years. Economists close to industry seem convinced that the revised figures for 1984 and 1985 will in due course show a growth of productivity which will go far to justify the rise in wages, as has already emerged for earlier years. If this is true, then the campaign for more moderate increases in 1986 will not come too late.

Productivity is an elusive, though, if the products are not wanted, as is illustrated by the sad case of Austin-Rover which last year achieved a remarkable jump in output, but lost market share. Such stories are still far too common in British industry. If design and marketing could come near to the progress already achieved in British industry in productivity then the recovery would indeed be sustainable.

**WORLD STOCK MARKETS**

**The spotlight is on Europe**

LAST year was "the kind of year to tell your grandchildren about," according to Mr Steven Schaefer. He is among those US portfolio managers who in 1985 made a memorable killing for their clients by investing in continental stock markets.

1985 was a vintage year for equities worldwide. Wall Street and London both advanced to record levels with the Dow Jones Industrial and the Financial Times Ordinary Indices brushing aside the 1,500 and 1,100 barriers respectively. But the highest gains to be had over the period were on the Continent.

A key factor behind the performance has been the sheer weight of money which foreign institutions have allocated to what was once an unfashionable area for investment. Inspired by the widespread belief that many national economies are set for a period of sustainable economic growth and low inflation, they have helped push continental share prices up by more than 70 per cent, as measured by Capital International's Index.

US and UK institutions, faced by domestic markets which have been generally more hesitant, have been expanding their overseas portfolios and there has also been more cross-border investment within Europe. In West Germany, the largest continental market where prices have risen more than 65 per cent, as measured by 70 international's index.

The trend is part of a globalisation of equity markets which has quickened markedly during the year. Increasingly, shares are being offered to investors outside their country of origin, and are traded by the biggest securities houses around the world in a 24-hour market.

At the same time, financial assets such as shares and bonds have become more attractive investments because the policies of industrialised countries since the late 1970s have largely squeezed inflation out of their economies, with the result that real returns are less likely to be eroded.

The 1980s will probably be characterised as the decade of securities, whereas the 1970s would probably be called the decade of raw materials in view of their sharp increase in value, and the 1960s the decade of labour," wrote Mr Henri Meier, a management board member of Handelsbank, a National Westminster Bank subsidiary, in an introduction to a new handbook entitled "The Swiss Equity Market".

The shift to free-market economic policies, epitomised by President Ronald Reagan and Mrs Margaret Thatcher, has produced greater confidence in financial instruments. The recent Reagan/Gorbachev summit also helped to bolster belief that the political backdrop for the markets is encouraging.

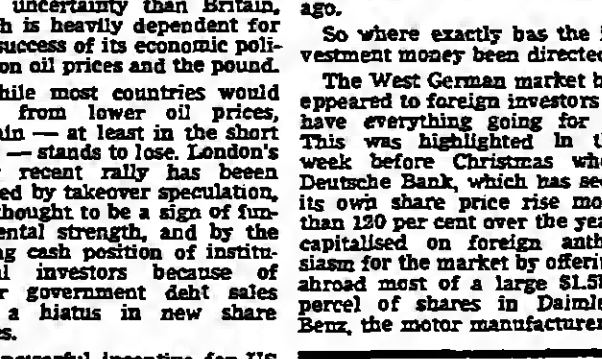
Most of the investment money has gone into US markets, continuing a long Reagan rally. But fears that the Reagan economic boom may be running out of steam have made foreign markets more attractive and encouraged further diversification of US portfolios.

Overseas investment still represents a tiny proportion—perhaps one-fortieth—of the \$1,000bn or so available to be invested by U.S. pension funds. But the dollar's fall after a

**It was a good year in London and New York**



**but the most spectacular gains were in Europe**



**as foreign investors tried to escape the falling dollar**



**ALEX NICOLL looks at the rise of the global equity and the increase in cross-border investment over the past year**

The well-known Daimler name and the pricing at an attractive discount to the market level ensured that the shares, distributed through the highly efficient syndication system used in the Enrobbard market, were snapped up within hours.

Underlying the West German market is the outlook for economic growth of 3 per cent or more next year with inflation at not much over 1 per cent. Exports are expected to remain strong. The healthy economic background allows forecasters to predict that corporate profits will remain buoyant, growing by 15 per cent or so in the coming year. The ruling coalition Government is expected to survive elections in 1987. The D-mark's likely continued strength makes investment even more appealing to dollar-seeking investors.

The West German economy, and others in Europe, perceived as having been through the wringer of recession and as emerging leaner and more profit-oriented. The resulting burst of consumer spending is occurring later than in the US. This makes consumer-based European companies particularly attractive, and these often have the added advantage that their names, such as Heineken or Nestle, are known to international investors as brand names.

Switzerland and the Netherlands have benefited from the

**Men and Matters**

The Labour Party is leaving no stone in Throgmorton Street unturned in its search for respectability among the business community.

Not only is it seeking to introduce its policies to the middle-class ranks of the City of London, it is also planning to do so in a way which they would surely approve—for profit.

The Fabian Society, an old friend of the Labour Party, which has the race-winning tortoise as its emblem, will organise a conference at the London Press Centre on February 11 to discuss Labour's "Policies for Business".

The object is to attract those who think (fear?) that Labour might, after all, form the next government, and wish thus to get to know what Labour has in store for them.

The day's business will be chaired by two Lords as further evidence of the broad church now offered by Labour. They will be Lord Barnett, the former Treasury Secretary, and Lord McIntosh of Harrogate, who was brutally deposed from the leadership of the Greater London Council by Ken Living-

**Pitch for City friends**

stone and his left-wing faction after just one day in the job. McIntosh's presence at the conference will remind the audience of the hard pounding that may be expected when Labour is in office and at work.

Roy Hattersley, the shadow Chancellor, will address himself to the economic problems facing an incoming Labour government. Bryan Gould, the shadow trade minister, will map out Labour's policies for the City. John Smith, the shadow trade and industry secretary, will talk on Labour's industrial policies.

The three represent Labour's reformist face. And it is a reasonable bet that they will want more reforms—and certainly different reforms—than their audience would wish.

And the cost of having your spine chilled? It will be about £120 plus VAT. This will include lunch and refreshments. Clearly there is no such thing as a free fright.

**Table talk**

The pecking order is all-important in Japanese official circles, which is why two distinguished Westerners who are visiting Tokyo this month, are being asked to swap the venues for their main speeches.

It was arranged that Katherine Graham, the redoubtable publisher of the Washington Post, should address a Japan National Press Club lunch. She is visiting Tokyo because Newsweek, part of her publishing stable, is to launch a Japanese language edition.

It so happens that Jacques Delors, president of the European Commission, will be in Tokyo at the same time and he was booked to speak on the same day as Mrs Graham at the Foreign Correspondents' Club.

**Goskirk's energy**

The arrival of Ian Goskirk, aged 53, a life-long oil man, at Coopers and Lybrand's management consultancy to set up an oil and gas practice, is a sign of the fast-changing times in the energy business.

Until the Government closed the British National Oil Corporation last November he was the chief executive with responsibility for a turnover of £10bn a year trading North Sea oil.

The rising cost to the Government of that form of intervention in the oil trade brought the exercise to a sudden halt, leaving Goskirk and about 100 others out of a job. About 50 employees remained to run the surviving Oil and Pipelines Agency.

Goskirk believes he is in the right place at the right time in his new job as an independent adviser to the energy market. "The industry can no longer gear itself in terms of the 1970s or the 1980s. Those

**Last drop**

If you are attracted by the cashew, here is wine of 1985 you will have to sup Binger Scharlachberg Riesling Qmp Elbswein Villa Sachsen.

Grants of St James, the vineyard's London agents, have told me a charming tale about the gathering of the grapes for this wine.

Well before sunrise on New Year's Eve a band of friends and neighbours, hastily rousted out of bed, gathered on the freezing slopes of the Scharlachberg vineyard and picked the frozen Riesling grapes in a temperature of -9 degrees Centigrade.

They used the headlights of their cars to illuminate the vines.

The whole crop was picked and sent for immediate pressing by mid-morning. It will produce about 900 bottles which will sell at about £40 a bottle in three years' time. When I am promised, "It will taste of pure nectar."

**Half-baked**

Last week I brought you the observation from a Chelsea wall that "The upper crust is just a lot of crumbs sticking together."

A West End of London reader disagreed. He says "The upper crust is a lot of crumbs held together by dough."

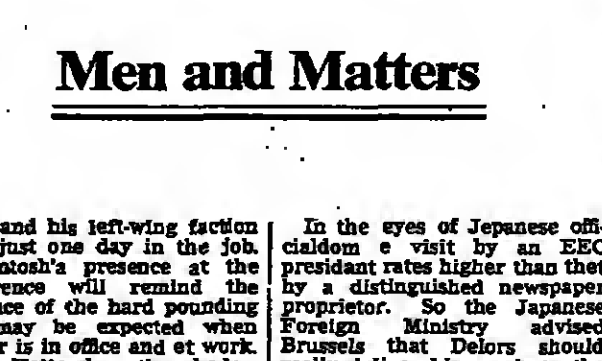
**Observer**

**WESTLAND**



"The shareholders love us—they love us not..."

**Men and Matters**



Quality in an age of change.

days are gone. It must now make decisions based on forecasts for demand in the 1990s."

His own forecast is that the static market and declining prices will force the oil industry into a spate of mergers, takeovers, and large-scale reorganisation.

A career Shell man, his own experience illustrates the way the industry has come full circle. In the 1970s he helped prepare Shell's Venezuelan interests for nationalisation. Ten years later he was preparing British state oil interests for privatisation.

**Observer**



Quality in an age of change.

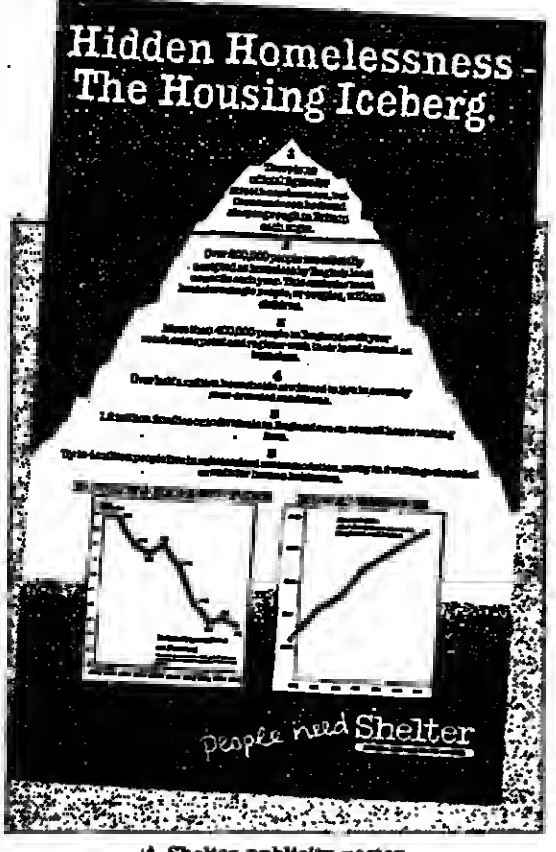


HOMELESSNESS IN BRITAIN

The problem is getting worse...

By Robin Pauley

IT IS a cold rain-soaked December night well before the theatres and restaurants empty and London's metropolitan bustle starts to die down. Very young boys prostitute in Leicester Square and Piccadilly... away from the family home, have all added to the problem.



A Shelter publicity poster

HOMELESSNESS is not a one-week seasonal aberration - no it is confined to Britain. "The worst times are in January when it's always wet and February when it's always much colder," says Michael, an Ulsterman preparing to spend the night in his ragged overcoat and some cardboard boxes arranged around him.

time record of 500,000. In addition there are more than 116,000 empty local authority homes in England and Wales, enough theoretically to all but eliminate the homelessness figures. Around 26,000 have been empty for more than a year, including 9,000 in London. Some are unfit, some are awaiting repair by councils which have run short of cash and some - about 16 per cent - are being kept empty deliberately for more than a year by councils which want to sell them.

Lombard A job insurance guarantee fund

By Samuel Brittan

ONE little-discussed item in the latest package of job measures, announced by Lord Young, the Employment Secretary, last November, was the virtual winding-up of the Redundancy Fund. Employers with ten or more workers will have to meet redundancy payments themselves, instead of receiving 35 per cent from a Central Redundancy Fund. The savings will be used to help finance new job promotion schemes.

US leveraged buyouts

From Mr R. Leutwiler Sir - The success of US leveraged buyouts is undeniable. Looking at them superficially from the outside, everybody seems to benefit: the public shareholders receive cash for their investment with an appreciable capital gain, the providers of finance can expect much higher returns than they would normally obtain elsewhere, LBO organisers and a number of legal and other financial advisers earn not-negligible fees and commissions and the members of the management team being now part-owners become more motivated through the potential appreciation of their personal investment.

Letters to the Editor

done before our authorities will be obliged to introduce controls which unfortunately will have many other negative side effects to our system of free economies? Rudolf G. Leutwiler, 7, ch. de Pre-Potet, 1253 Vandœuvre, Geneva, Switzerland. Sir - In 1981 United Technologies earnings per share were \$2.85. For the first six months of 1985 they were \$1.29 and for the year just ended are estimated in the range \$3.00-\$3.50.

why not against W. Germany?

It is because of the huge trade deficit with Japan? Party yes. China has trade deficits with not only Japan, but US, EC, even Hong Kong and others. So why not demonstrate against these? It is because Japan's intention to monopolise the Chinese market and its unwillingness to invest in or transfer technology to China angered the Chinese people's feeling towards Japanese businessmen, which was ignited by the film 'Four Generations under one roof' depicting the miserable life of Peking citizens during the Japanese occupation. The film was shown during the summer to commemorate the anniversary of the end of the anti-Japanese war. And many young people learned of Japanese cruelties through this. The feeling was triggered, I think, by two incidents: a great disaster of the import of 5,800 Mitsubishi trucks of low quality and Mr Nakasone's official visit to the Japanese shrine of the war dead.



PROFIT FROM A WIDER VIEWPOINT.

For a strategic overview of the international business scene, all you need is The Wall Street Journal/Europe. The Journal offers you: a concise daily summary of international corporate and economic developments, a comprehensive package of international capital market news and financial information, a unique and sometimes controversial editorial position on European economic and public policy issues, and the most complete coverage of the American economy and American business available this side of the Atlantic.



GO STRAIGHT TO THE TOP



**SHEERFRAME**  
 Britain's largest producer of uPVC window and door profiles.  
 Sole manufacturers and patentees:  
**L. E. Plastics Limited**  
 10, Waltham Road, Waltham, Essex, S.S.24 2JL  
 Tel: 02783 2311, Telex: 37282

# FINANCIAL TIMES

Monday January 6 1986

**Tarmac**  
 construction  
 Construction at its best.  
 0902 22431

Terry Byland  
 on Wall Street

## Interest grows for banks

THERE SEEMS to be no end to Wall Street's passion for stocks in the money-centre banks - the very same stocks that seemed about to disappear into the abyss only two years ago.

Despite their strength over the past 12 months, bank stocks featured strongly in the New Year crop of recommendations from the analysts.

The stocks were not recommended on the basis of the excellent results for the 1985 final quarter, which will be disclosed before the end of this month.

Earnings for fiscal 1985 are likely to show gains of around one third at Chase Manhattan and J. P. Morgan, with smaller but still healthy increases at most of the other leading names.

The money-centre stocks are still rated a buy at the brokerage houses because the factors that boosted them last year are expected to remain in play in 1986.

The principal factor was the plunge in US interest rates and the market's anticipation of the trend. Banks were repeatedly successful in holding prime rates steady for some weeks after money-market rates had dipped - indeed they are repeating the exercise at present.

But the money-centre banks also benefited strongly from an easing in the worries surrounding the loans to Latin American and Third World countries. The plan by Mr James Baker, US Treasury Secretary, helped to calm those fears and has received increasingly strong acceptance on Wall Street.

Stock	p/e
Chase Manhattan	6
Citicorp	7
Chemical	8
J. P. Morgan	8
S & P 500	14.88

Regional bank stocks are viewed more selectively. Those banks which have avoided the worst pitfalls associated with the domestic energy and farming loan problems have followed the money-centre banks and are likely to continue to do so.

One reason that bank stocks should do well, at least in the early months of this year, is that last year's rise was surprisingly late in coming - always allowing for the wisdom of hindsight.

Falling short-term interest rates, which have been the motor behind rising bank profits and stock prices, made two false starts last year.

Only after Wall Street decided that US rates would be allowed to fall as part of the Group of Five plan to lower the dollar did the downward slide in the money market reach full throttle.

Consequently, while bank stocks did well in the first nine months of 1985, they failed to match the gains in the Standard & Poor's 400 index - the traditional yardstick for comparison with industrial, over that period.

It was in the final three months that the money-centre stocks dramatically outperformed the S & P 400, so that at the year's end, the money-centre indices showed an average gain of 34 per cent, against 25 per cent on the S & P index.

That is the heart of the stock market's case for expecting further gains in money-centre stocks over the opening three months of the new year.

Surprisingly, bank stocks still seem to be relatively low-rated in the market, despite their strength over the past year. The average price/earnings ratio on money-centre banks is still less than 50 per cent of that on the S & P. In mid-1985, the bank p/e ratios stood at a more normal 70 per cent on the S & P, so present levels indicate that there is room for a further advance in stock prices.

The scope for improvement ranges widely. Citicorp, high on the list of the market's favourites, rates a p/e only just below 50 per cent of the S & P, while Chase Manhattan and Chemical New York fall well short of it.

Earnings ratios on the regional banks are mostly higher than those on the money-centre stocks, and the stocks have thus correspondingly less room for further gain.

Overall, the bank stocks, although the most interest-sensitive sector of the market, fared last year to match the performance of insurance, utility and even brokerage stocks.

The omens suggest that they still have some catching up to do, and that last week's buyers of the money-centre issues are away to a good start to 1986.

David Gardner looks at the US-Mexico summit

## Baker debt plan given boost

THE BORDER summit in Mexico between President Miguel de la Madrid and President Ronald Reagan appears to have set the seal on markedly improved US-Mexico relations, and to have given "new momentum" in the words of a senior US Administration official, to the Baker Plan for relieving Third World indebtedness.

The four-hour meeting on Friday afternoon began and ended with two hammering 21-gun salutes. But whereas gunpowder smoke from the opening cannonades threatened totally to envelop the arriving delegation, by the time of the parting howitzer salute, the wind was clearly blowing another way.

At the foot of Mr Reagan's helicopter, the two presidents even shared an unscheduled embrace, an important ritual in Latin American politics and diplomacy but one that had been ruled out because of the two men's differences in stature.

President Reagan emphasised that the US stood ready to assist Mexico, which owes \$96bn abroad, in tackling its financial difficulties, while Mr Jesus Silva Herzog, the Mexican Finance Minister, said afterwards that the talks "will help smooth our path in 1986".

Mexico's difficulties in servicing its debt, particularly in the face of falling prices for oil, its principal export, dominated the meeting. The Baker Plan, according to officials from both sides, was "the heart of the economic discussion".

Little detail has emerged of the talks between Mr Silva Herzog and Mr James Baker, the US Treasury Secretary and author of the plan to engineer new commercial and multilateral credit for Third World debtors who commit themselves to structural economic reform. However, Mexico believes the reforms it is already trying to introduce fall well within this so far vague definition, and that it is therefore well placed to take advantage of the plan's benefits.

Mexico's main caveat, officials say, are that the Baker Plan itself should not be seen as a solution to the debt problem, and that no such solution is imaginable without the restoration of growth to Latin America's economies.

A senior US official at the meeting insisted that the plan accommodated that need. "The Baker Plan is a very flexible approach, orientated towards growth, not austerity," he said. "The US had the impression that Mexico will take every advantage of it."

More immediately, the US would fully support Mexico's efforts to secure new net foreign finance this year of about \$4bn, officials from both sides said.

Relations between the two countries have been bedevilled over the past two years principally by differences over the Central America conflict and Washington's dismay over Mexico's growing role in the international drugs traffic.

Last spring's murder of Enrique Camarena, a US Drug Enforcement Agency undercover agent, by Mexican narcotics baron, apparently under the protection of senior police officials, led to a near breakdown of diplomatic contact and a partial closure by the US of its 3,000 km border with Mexico.

The most tangible decision so far to have emerged from Friday's talks is that Mexico will host an international summit of attorneys-general on how best to co-ordinate action against the drugs industry.

Central America, the issue that has dominated the three previous meetings between Mr de la Madrid and Mr Reagan, still presents an important difference, which is acknowledged by both sides, but on which they have seemingly agreed to differ.

Mr de la Madrid emphasised at the meeting the need to seek negotiated solutions to the region's conflicts based on each individual country's right to self-determination - a clear reference to Nicaragua. But in practice, Mexican efforts to promote that - through the Contadora group along with Colombia, Panama and Venezuela, and through the talks in the Mexican resort of Manzanillo it promoted last year between the US and Nicaragua's left-wing Sandinista Government - have floundered.

The Manzanillo talks have been suspended indefinitely, Mexico has withdrawn from the front line of

the peace effort, and the US is once again able to applaud the sentiments behind the Contadora process in the knowledge that it is bogged down in procedural confusion, caused primarily by its own Central American allies, El Salvador, Honduras and Costa Rica.

Senior US officials in Mexico sounded unusually comfortable in their expostions of Washington's differences with Mexico over Central America, which centre increasingly on how the US is waging proxy against Nicaragua through the Contras based in Honduras and Costa Rica and the economic embargo against the Sandinistas.

One senior US Administration official explained that "the Mexican view emphasises diplomacy as the only effective method... our view is that very strong pressure is required to make diplomacy work", almost as though only nuptials could distinguish between the two formulations.

The same official had earlier expressed the belief that Latin American and West European opinion had "in general been moving our way on the Central American issue". Such a perception of Mexico's growing isolation, and faltering protagonism on the issue appears to underlie the new ease with which Washington now accommodates the Mexican view of the region, and has added a much-needed glow to the two countries' bilateral relations.

THE LEX COLUMN

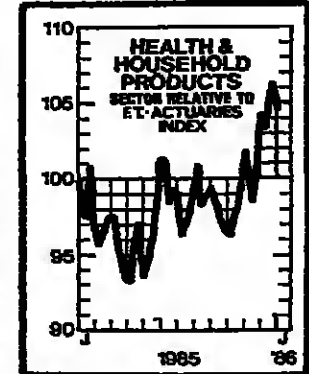
## The blades out at Westland

The struggle for the future of Westland has long ceased to be a straight reconstruction exercise, in the manner of the last Cuckney/Lazards joint effort at John Brown, and has begun to resemble a contested takeover à la Dunlop. The revised recapitalisation terms involving UTC and Fiat, which will be presented to the public today and to shareholders formally on January 14, are most unlikely to be the last word on the subject. Too much political and industrial capital has gone into the rival proposal from the European consortium for Westland to vanish from the news pages for eight days.

As it is, today's revised proposals - whatever their legal status - should make up the financial disadvantages which the institutions and the creditor banks have been quick to detect in the American-Italian scheme. Given the rise in Westland's price to 85p, the 5p difference between the two subscription prices for the rights issue does not amount to much; however, in switching the UTC option over Westland equity to the shareholders - as in the European scheme - the institutions will now be left with a fully diluted shareholding equivalent to that proposed by the Europeans. As for the banks, it seems that the European offer on the conversion of debt will be matched. Presumably, the 55m difference will not be the bank at Sikorsky or Fiat.

However, the real problem arises in the way the Westland board is set on presenting only the American-based proposal to shareholders. Of course a single recommendation would be the board's responsibility anyway, with two rival proposals, neither would probably achieve the necessary 75 per cent approval, thus plunging Westland back into its hole. This does not mean that the institutions will not reject the proposal or the consortium take legal action, improve its offer or even buy some Westland shares. Indeed, it is hard to imagine either the UK Defence Ministry or the European companies being content to have acted merely as a stimulus to an improved proposal involving Sikorsky.

But unlike a cash takeover, shareholders cannot take their money and run: the residual value of Westland paper will depend as much on the political and industrial



A single poor year in prospect would not much matter if the management of the Foundation were communicating enthusiasm to the market. The opposite is the case. At times, the Wellcome board has seemed to be rubbing its hands in the dim short-term outlook while warning that new products in the research laboratories, even if effective, are a long way from prescription. Of course, no business with the traditions of the Wellcome Foundation would wish to start public life on a stock-market treadmill; but the Trust, and its advisers at Robert Fleming, must be worried that its 20 per cent might better have been left earning reasonable sums under covenant.

But that is only half the story. If this year's forecast performance by the Foundation were restated at 1983-84 exchange rates, profits growth would still beat estimates for the market as a whole and all but Glaxo and Fisons in the pharmaceutical sector. Meanwhile, if the animal health business is excluded, Wellcome is as profitable as the best standards of the industry - despite expenditure on research that all but matches ICI Pharmaceuticals as a proportion of sales.

At a multiple of 15 or 18 times expected earnings, Wellcome will rank with Fisons equal third in sector market capitalisation behind Glaxo - where there are doubts about the continued phenomenal growth of Zantac - and Beecham, whose share price contains a bid premium that used to be considered fanciful in such a large capitalisation stock. However, only 25 per cent of Wellcome's equity is on offer, and none of that is being placed with US professionals for whom Burroughs Wellcome is a respected name. The last large pharmaceuticals company offered to the London market was Amersham, and everybody knows what happened there; while being a dollar play with the dollar falling did Laura Ashley's share price no harm.

It is this suggests that Wellcome might be a candidate for offer by tender, then the six merchant banks and brokers involved would do well to consider that path. Stags and underwriters might not be happy, and a tender might be somewhat *brutta figura* for Flemings; but it might well save embarrassment for all concerned.

## Changes sought in N. Ireland one-judge, non-jury courts

BY HUGH CARNEY IN DUBLIN

MR PETER BARRY, the Irish Foreign Minister, yesterday called strongly for changes in the one-judge, non-jury courts in Northern Ireland, and he wanted radical changes in the use of informers by the Royal Ulster Constabulary.

It was the most explicit public comment by the Irish Government on its unhappiness over the Northern Ireland system of justice since the signing in November of the Anglo-Irish agreement which for the first time gave Dublin a consultative role in the affairs of the province.

Mr Barry's comments contradict an understanding that the two sides would confine their differences to the privacy of the intergovernmental contact set up under the pact.

They indicate the level of concern in Dublin that changes must be made quickly to prevent more disaf-

ected nationalists from supporting the Irish Republican Army (IRA) and its political wing, Sinn Fein. That is seen as especially important because the by-elections caused by the resignation from Westminster of Unionist MPs protesting at the accord are due on January 23.

Mr Barry is co-chairman with Mr Tom King, Northern Ireland Secretary, of the intergovernmental conference.

Last week he called a special meeting of the conference to express concerns after the conviction of 27 Republicans jailed for from five years to life on the evidence of Mr Harry Kirkpatrick, a convicted Irish National Liberation Army killer turned informer. Three of the prisoners are on hunger strike in protest.

Mr Barry said in a radio interview that an anticipated announce-

ment that jury courts would be introduced for non-terrorist crimes in Northern Ireland did not go far enough.

"These are really quite minimal [changes] and in our efforts to build up confidence in the administration of justice we would be looking for much more than that," he said.

Outlining what he called minimal demands, he said he wanted the present single judges sitting in the so-called Diplock courts increased to three.

On informers, he said there should be no convictions on uncorroborated evidence; limits should be set on the number of defendants arraigned in a single trial; and the duration of trials should be reduced. It was unacceptable that defendants could be held as long as four years before all appeals processes had been completed.

Street violence, Page 6

## Hart drops out of Senate contest

By Nancy Durne in Washington

SENATOR Gary Hart, a candidate for the Democratic presidential nomination in 1984, said at the weekend that he would not seek reelection to the US Senate next year, but stopped short of announcing an outright bid for the presidential nomination in 1988.

Mr Hart, whose campaign for "new ideas" brought him close to beating former Vice President Walter Mondale for the Democratic nomination two years ago, is widely considered to be the front runner, now that Sen Edward Kennedy has dropped out of the contest. He is expected, however, to face a clutch of attractive lesser-known candidates, including Sens Bill Bradley of New Jersey and Joseph Biden of Delaware, and New York Governor Mario Cuomo.

Still burdened with a \$3.4m campaign debt from his 1984 presidential run, Mr Hart hinted broadly that he would enter the contest in 1988 and, in the meantime, concentrate his efforts on fund-raising and "on our unmet agenda for the future."

"My work has yet to be done," he said, speaking at a well-attended press conference near his picturesque Colorado log cabin. "As I forge some role to help move our party and our country into the future, I won't be coy about my plans," he said.

By withdrawing from the Colorado Senate race, a contest he insisted he could win, Mr Hart leaves open a key seat in the coming battle for control of the Upper House. The leading contender to fill Mr Hart's seat is Democratic Representative Timothy Wirth, a leader on telecommunications issues in the House, and one who may be attacked for his role in the unpopular break-up of the Bell telephone system.

At least three Colorado Republicans will seek their party nomination for the Senate seat. The best known is Representative Ken Kramer, a four-term Congressman and a leading advocate of the US Strategic Defence Initiative.

## Inquiry begins into leak at nuclear plant

Continued from Page 1

tion to the eyes, skin and respiratory system.

A Kerr-McGee spokesman said that a radiation survey of the area would be conducted, but a preliminary study indicated that radioactivity was at normal levels.

The incident is believed to be the most serious in the US nuclear industry since the accident at the Three Mile Island power plant near Harrisburg, Pennsylvania in 1979. That plant was itself closed yesterday when a valve failed to open and allowed a small cloud with traces of radioactivity to escape. It was later restarted.

## Improved Sikorsky offer expected

Continued from Page 1

be continued to campaign in favour of the European rescue package for Westland despite the Cabinet agreement not to take sides.

He is, however, seeking to shift the public focus away from himself onto leading British industrialists following yesterday's approach by GEC and British Aerospace to the Westland board. He also backs the call for a postponement of the company's January 14 meeting to give more time for the European option to be considered and to gain support.

There appears to be no immediate question of either his resignation or dismissal but this could change if Mrs Margaret Thatcher moves away from her present detached approach.

The Prime Minister has refused to reopen the question or to discuss it with him despite a request from the Defence Secretary for it to be reconsidered by a Cabinet committee.

The issue was not mentioned last Friday at a Cabinet committee meeting primarily called to discuss the Channel fixed link, even though the meeting was chaired by Mrs Thatcher and attended by both Mr Heseltine and the other main protagonist, Mr Leon Brittan, the Trade and Industry Secretary.

However, Mr Heseltine has the right to raise the matter at the Cabinet meeting this Thursday, even though Mrs Thatcher can cut off discussion. He believes that if the issue is fully discussed and the Government takes a position, it is bound to be in favour of the European offer.

Mrs Thatcher's view seems to be that, since that decision is being left to the company, there is nothing more for the Government to say or do, and that Mr Heseltine is only isolating and injuring himself by his, possibly unsuccessful, campaign.

Mr Heseltine's allies say he has not violated the letter of the Cabinet decision of December 19 which allowed him to deal with defence procurement aspects. He has not publicly questioned the way the matter has been handled by other ministers, and his letter last Friday to the European consortium was merely an amplification of the Prime Minister's letter on Thursday.

However, some of Mr Heseltine's colleagues, especially Mr Brittan's supporters, argue that the Defence Secretary is flagrantly undermining the spirit of the Cabinet's approach by the extent of his intervention in the affairs of Westland

and that therefore he should be told to be quiet.

Some senior party managers take this view given the possible damage to the Government and they want the affair to be over when Parliament returns next week.

Mr Heseltine would be placed in an even more vulnerable, and possibly untenable, position if Mrs Thatcher this week instructs him not to make any further comment and if the January 14 meeting goes ahead with the Sikorsky/Fiat option being overwhelmingly approved.

The Defence Secretary's current tactics are to stress the implications for British industry. This has been aided by the warning about possible adverse implications for British companies of the Sikorsky/Fiat option from Lord Gregson, the president of the Defence Manufacturers Association. Mr Heseltine is also clearly hoping that the initiative will now be taken up by GEC and British Aerospace to reduce charges of political interference.

Mr Heseltine has been careful to keep in touch with many of the leading defence specialists among Tory MPs, including the officers of the benchmark committee, who have been active on his behalf.

## World Weather

Place	C	F	Place	C	F
Algeria	16	61	London	10	50
Amman	18	64	Madrid	12	54
Baghdad	18	64	Manchester	10	50
Bangkok	28	82	Paris	10	50
Bombay	28	82	Rome	12	54
Buenos Aires	12	54	Stockholm	5	41
Calcutta	28	82	Tokyo	10	50
Cairo	18	64	Washington	10	50
Cardiff	10	50	Wellington	10	50
Chennai	28	82	Yokohama	10	50
Copenhagen	10	50			
Dublin	10	50			
Hong Kong	28	82			
Jakarta	28	82			
London	10	50			
Los Angeles	18	64			
Lyons	10	50			
Madras	28	82			
Manila	28	82			
Medan	28	82			
Mumbai	28	82			
Nairobi	28	82			
Osaka	10	50			
Perth	10	50			
Rangoon	28	82			
Reykjavik	10	50			
Singapore	28	82			
Sydney	10	50			
Taipei	10	50			
Tel Aviv	18	64			
Tokyo	10	50			
Yokohama	10	50			

## US and Israel given warning

Continued from Page 1

had come from Libya. "They might have come from America," he said.

"There are thousands of Palestinian refugees in America."

"We support freedom fighters, particularly our brother Palestinians, but we are not responsible for their attacks," the Libyan leader said.

Mr Yasser Arafat, the chairman of the PLO which several years ago condemned Abu Nidal to death, claimed in an interview yesterday that Syria and Libya were behind recent terrorist attacks and hijackings.

**Thornton Baker**  
 are pleased to  
 announce  
 55 new offices.

Grant Thornton ATLANTIC CITY	Grant Thornton CRAWLEY	Grant Thornton ISLE OF WIGHT	Grant Thornton NORTHAMPTON
Grant Thornton BANGOR	Grant Thornton EASTBOURNE	Grant Thornton NETTERING	Grant Thornton NOTTINGHAM
Grant Thornton BATH	Grant Thornton EDINBURGH	Grant Thornton LEEDS	Grant Thornton MUNSTON
Grant Thornton BEDFORD	Grant Thornton EVESHAM	Grant Thornton LEICESTER	Grant Thornton OXFORD
Grant Thornton BERGINGHAM	Grant Thornton GLASGOW	Grant Thornton LIVERPOOL	Grant Thornton PETERSFIELD
Grant Thornton BOURNEMOUTH	Grant Thornton GLASGOW	Grant Thornton LONDON	Grant Thornton PLYMOUTH
Grant Thornton BRADFORD	Grant Thornton HEATH	Grant Thornton LUTON	Grant Thornton POOLE
Grant Thornton BRIGHTON	Grant Thornton HIGH WYCOMBE	Grant Thornton MANCHESTER	Grant Thornton PORTSMOUTH
Grant Thornton BRISTOL	Grant Thornton HINCKLEY	Grant Thornton MILTON KEYNES	Grant Thornton PRESTON
Grant Thornton BURY ST. EDWARDS	Grant Thornton HULL	Grant Thornton NEWCASTLE	Grant Thornton READING
Grant Thornton CARDIFF	Grant Thornton KINGSTON	Grant Thornton NEWCASTLE	Grant Thornton RUSHDEN
Grant Thornton CHESTER	Grant Thornton LONDON	Grant Thornton NEWCASTLE	Grant Thornton SHEFFIELD
Grant Thornton CHIPPING NORTON	Grant Thornton LONDON	Grant Thornton NEWCASTLE	Grant Thornton SOUTHAMPTON
Grant Thornton CLEVELEIGH	Grant Thornton LONDON	Grant Thornton NEWCASTLE	Grant Thornton WARRINGTON
Grant Thornton CLYDEBANK	Grant Thornton LONDON	Grant Thornton NEWCASTLE	Grant Thornton WELLSBOROUGH
Grant Thornton COBLENZ	Grant Thornton LONDON	Grant Thornton NEWCASTLE	Grant Thornton WITNEY
Grant Thornton COVENTRY	Grant Thornton LONDON	Grant Thornton NEWCASTLE	Grant Thornton WORTHING

From January 1st Thornton Baker will be known as Grant Thornton.  
 A change of name but not a change of philosophy. We still plan to offer the same close personal service backed by the largest network of regional offices in the country.  
 With more offices in more places, we have an in-depth knowledge of the local environment which enables us to offer more informed advice on your business.  
 This increases our familiarity with both individuals and their business needs. And, quite simply, makes keeping in touch that much easier.  
 Because direct involvement has no substitute, at Grant Thornton our structure guarantees that every office has partners directly involved in the business.  
 Their involvement is an essential part of our service. The high ratio of partners to staff enables complex problems to be dealt with by senior people and ensures every client has access to expert opinion on the spot.  
 At the same time we always have the flexibility to call on support from our national resources.  
 Every Grant Thornton office can offer you traditional financial guidance or general business advice wherever you are an individual or responsible for running a business.  
 Return the coupon for more information or if you have a specific enquiry please telephone your local office. The sooner you do, the closer we'll get.

The National Marketing Dept., Fairfax House, Pall Mall Place, London W1V 4RW. Tel: 01-406 2422.  
 Please send the details of the full range of Grant Thornton's services. Place Post

Name (Mr/Ms/Ms)  
 Job Title  
 Company  
 Address  
 Postcode

Overseas Tel: FTo/1

**Grant Thornton**  
 CHARTERED ACCOUNTANTS  
 The UK member firm of Grant Thornton International.

مكتبة الأمل



**KIVETON PARK STEEL**  
 BRIGHT FREE MACHINING STEEL  
 FOR FORGING, UPSETTING  
 & EXTRUSION FROM KIVETON PARK

- Rounds, hexagons, flats, carbon and alloy steels. Coated coils for cold forging and extrusion, sections a specialty.
- All in a wide range of finishes. Sizes from 1/2" - 3"

# SECTION II - COMPANIES AND MARKETS

# FINANCIAL TIMES

Monday January 6 1986

**Lovell BICENTENARY**  
 Two centuries strong  
 and building  
 1786 1986

## Dutch bankers hail deregulation

## Of Truffles and Perrier pipes

WHILE most Eurobond syndicate managers headed for the ski slopes last week, bankers in the Netherlands stayed at home to usher in a new liberalised era in the Dutch capital markets, writes Alexander Nicoll in London.

The Amsterdam bond market had until the end of 1985 been fettered by many restrictions on the timing, nature and maturity of debt securities issues. The chains have not all been removed, but the appearance of every type of newly allowed paper on the first available day was an eloquent gesture of the markets' gratitude to the Government.

Despite the initial rush, however, it is not expected that there will be a huge upsurge in bond issue volume on the domestic Dutch market. With the bond market dominated up to now by the Government, borrowers are accustomed to being served by a well-established domestic long-term loan market. And though Dutch institutions are currently quite liquid, there are plenty of investment avenues other than the domestic bond market, particularly at a time of booming equity markets across Europe and elsewhere.

Besides, Dutch investors already rank alongside the famed Belgian dentist as buyers of Eurobonds.

Nevertheless, the latest deregulation considerably expands the options available to borrowers and issue managers. An issue can now be brought to market - provided there is not an issue glut forcing the central bank to step in - exactly when conditions are judged to be propitious.

Previously, there was a strictly enforced queue system in which an issue pulled from the calendar because the market was deemed unripe would then have to wait in line again for another two months or so.

The permission of bullet issues will make it immeasurably easier to arrange swaps. Since most international bond issues now involve a swap of some kind, the change will considerably enhance Amsterdam's attractions for borrowers.

Previously the authorities, concerned about distinguishing between money market and capital market instruments, had forced all

bond issues to have serial maturities.

Last week's Fl 500m straight World Bank issue, led by Algemeene Bank Nederland, was well received while the Fl 250m Security Pacific floater, led by Amsterdam-Rotterdam Bank, met some resistance in some quarters because its pricing, at 1/4 point above Libor with an 8 per cent cap, was seen as too aggressive. Both issues obtained broadly spread groups of co-managers including many leading Eurobond issuing houses.

The commercial paper and certificate of deposit markets, though both saw new issues from ABN - the paper was issued by Akzo - are expected to develop more slowly.

On the Eurobond market, Christmas and the lull of the year saw only a handful of new issues. Those that were launched went well. Secondary markets essentially marked

time. Swiss and German markets both showed marginal gains where changed on Friday.

The yen sector has been among the most active, with Friday seeing a 120bn issue from Ford Motor Credit. Nikko Securities (Europe) is lead-manager of the five-year bullet, with a 8 1/2 per cent coupon and a price of 101 1/4.

The growing role of the yen in the Eurobond market is one of the most striking features of the accompanying statistics, which were compiled by IDD Information Services.

The dollar's share of the market, though still dominant, dropped from 77 per cent to 70 per cent. With the D-Mark retaining second position with 8 per cent of the market, the yen jumped from sixth place to third, with market share rising from 2 to 5 per cent.

The reopening of the French franc market pushed the currency

into a respectable eighth position, but the sharpest increase was recorded by the Australian and New Zealand dollars. Even though they remain a small part of the overall market, the increase in the number of issues is impressive.

And such an increase in overall market volume - up 71 per cent on 1984 at \$124.4bn - is not surprising that there should be modest variations in individual houses' market shares. Virtually every house in the market will have managed considerably more issues in 1985 than in 1984.

Credit Suisse First Boston, with 14.3 per cent of the entire market against 18.1 per cent in 1984, remains the dominant issuing house.

Merrill Lynch and Salomon Brothers edge above Deutsche Bank, Morgan Guaranty and Morgan Stanley into second and third place respectively.

OVER the Christmas party season, our Euromarkets staff conducted a survey of bankers' predictions for 1986.

January: 8am. Credit Suisse First Boston launches its first Eurobond deal of the year, displacing Nikko Securities at the top of the league tables.

12am. CSFB launches its third deal of the year, bringing its total to \$1bn. Its position remains unassailable all year. Surprise abounds when Hans-Joerg Rindloff tells Euroromoney that the Eurobond market is on the verge of death.

February: Merrill Lynch brings the first TRUFFLE to the market. The Transferable Revolving Underwriting Facility for Financing Loose Ends is hailed as a major and exclusive innovation. The name quickly proves justified, however. Buying even a very small portion of the deal turns out to be highly expensive for participating houses.

March: In a desperate effort to reduce the budget deficit, President Reagan mortgages the White House. Salomon Brothers repackages the mortgage and sell it in Europe.

Ford, GMAC and Chrysler each launch their 10th deal of the year - none of them has given co-managers a profit.

April: On the first day of the month, the World Bank launches the first fixed-rate perpetual issue in the Eurodollar bond market. Bankers hail it as a sign of the maturity of the market but then realise Eugene Roberts was only kidding.

An amendment added to the Financial Services Bill going through the UK parliament requires dealers to pass a simple literacy test. Salaries of Eurobond dealers who can do so double; the rest move offshore.

May: Bond dealers gathering at the AIBD's annual cocktail party in Singapore discover that the weather is better than in Luxembourg and vote to turn the Eurobond market into the Asia-bond market.

June: Morgan Guaranty adds a twist to its flip-flop floater idea, making it a double back-saw-saw-saw. Sweden's Peter Engstrom wins the gold in the Eurogymnastics event.

CSFB launches its 100th deal of the year - an international share

placing for a small Swiss chocolate company.

July: General Electric Credit Corp invites every member of IPMA to bid for a \$100m deal, but then chooses the domestic market after all.

August: S. G. Warburg launches "Beasts" - Bearer Eurosterling Asset Stripping Transferable Securities - the first zero-coupon junk bond used to defend a company from an unwelcome predator.

September: CSFB launches its 150th deal of the year. Mr Rudloff announces that the market is not dead yet.

Applications for places at the Brussels School of Dentistry exceed supply by a factor of 10. Luxembourg banks buy the list for a mail shot to find new clients.

October: Fuji Bank shoots surprisingly to the top of the syndicated loan league tables. It launches the first deal of the year, a \$12m credit for the Andorra Narrow Gauge Railway. In a fit of pique Citicorp retaliates with a \$50m certificate of deposit programme for its Singapore branch.

November: Banque Nationale de

Paris launches a \$1bn project financing credit to fund a cross-Channel Perrier pipeline. The proposed Channel Tunnel is declared redundant as a result, dashing hopes of vast lending opportunities for international banks. But US banks still refuse to join the Perrier deal on the ground that Mrs Thatcher's Government will not guarantee its consumption of Perrier water.

December: Faced with the total failure of previous efforts to curb the US budget deficit, Treasury Secretary James Baker declares that the US has become the 10th country eligible to benefit from his plan for easing the debt crisis. The plan is modified to absorb all beneficiaries from any economic policy conditions.

Once again the Eurobond market has achieved a record volume with \$300bn of new issues launched during the year. Deal of the year was a \$5bn floating-rate-note issue paying 3/4 per cent under Libid for Papua New Guinea. This demonstrates once again the depth and maturity of this market, and also that during the year every floater that could be called has been.

Paris launches a \$1bn project financing credit to fund a cross-Channel Perrier pipeline. The proposed Channel Tunnel is declared redundant as a result, dashing hopes of vast lending opportunities for international banks. But US banks still refuse to join the Perrier deal on the ground that Mrs Thatcher's Government will not guarantee its consumption of Perrier water.

December: Faced with the total failure of previous efforts to curb the US budget deficit, Treasury Secretary James Baker declares that the US has become the 10th country eligible to benefit from his plan for easing the debt crisis. The plan is modified to absorb all beneficiaries from any economic policy conditions.

Once again the Eurobond market has achieved a record volume with \$300bn of new issues launched during the year. Deal of the year was a \$5bn floating-rate-note issue paying 3/4 per cent under Libid for Papua New Guinea. This demonstrates once again the depth and maturity of this market, and also that during the year every floater that could be called has been.

**TOP 20 EUROBOND LEAD MANAGERS**

Manager	1985			1984		
	\$bn Amount	Rank	Market share %	\$bn Amount	Rank	Market share %
Credit Suisse First Boston	18,206	(1)	14.5	12,833	(7)	14.1
Merrill Lynch Capital Markets	7,824	(2)	6.3	4,302	(9)	5.5
Salomon Brothers	7,493	(3)	6.0	4,302	(9)	5.7
Deutsche Bank	7,236	(4)	5.8	8,181	(2)	7.4
Morgan Guaranty	7,782	(5)	6.2	5,887	(3)	7.3
Korona Stanley	6,520	(6)	5.2	4,521	(5)	5.7
Goldman, Sachs	6,410	(7)	5.1	2,373	(8)	3.0
Hessert Securities	6,087	(8)	4.9	2,734	(7)	3.5
Union Bank of Switzerland	3,835	(9)	3.1	1,387	(14)	1.5
Bank of Paris	3,276	(10)	2.6	1,438	(13)	1.8
Deutscher Wertpapier	2,988	(11)	2.4	1,420	(14)	1.8
Orion Royal Bank	2,442	(12)	2.0	1,127	(16)	1.4
Swiss Bank	2,546	(13)	2.0	1,284	(15)	1.6
Commerzbank	2,645	(14)	2.1	1,443	(12)	1.8
Shearson Lehman Brothers	2,482	(15)	2.0	1,253	(17)	1.5
Banque Paribas	2,416	(16)	1.9	2,025	(11)	2.5
S. G. Warburg	2,388	(17)	1.9	1,822	(8)	2.4
Country Bank	2,291	(18)	1.8	6,732	(4)	1.0
Lloyds Bank	2,221	(19)	1.7	6,448	(5)	0.8
Yamaichi	2,242	(20)	1.7	1,038	(20)	1.3
Industry Totals	134,294		1,265	73,888		800

**EUROBOND ISSUES BY CURRENCY**

1985 Rank	Currency	Total raised (\$bn)	No. of issues	1984 Rank	Total raised (\$bn)	No. of issues
1	US\$	94,155	681	(1)	60,881	688
2	Dm	11,388	165	(2)	6,571	38
3	Yen	7,919	98	(3)	1,380	29
4	Sw	6,707	127	(4)	2,821	62
5	£	5,438	60	(5)	4,138	48
6	AS	3,134	32	(6)	3,222	19
7	CS	2,288	26	(7)	1,907	41
8	FF	1,111	21	-	-	-
9	NZ\$	1,082	48	(10)	8,041	3
10	Fl	6,788	27	(11)	6,088	28

## EURONOTES AND CREDITS

### Merrill adds currency twist to RUF

A NEW TWIST has been given to the revolving underwriting facility (RUF) in a deal being arranged by Merrill Lynch Capital Markets for Société Lyonnaise de Banque, France's largest regional bank and the country's 15th largest by assets, writes Alexander Nicoll in London.

Underwriters of the \$50m five-year credit will each be given the option every six months to receive, instead of the 10 basis-point annual underwriting fee, a line extended by Lyonnaise in domestic French francs. The option will apply to each \$1m amount underwritten, so that a bank underwriting this amount would be able to borrow, instead of receiving its fee, the franc equivalent of \$1m.

The effect of exercising the option would be that participating banks and Lyonnaise guaranteed to

lend to each other without paying or receiving underwriting fees.

The multicurrency transferable RUF will enable Lyonnaise to issue certificates of deposit in dollars or European currency units, with an issuer-set margin at a maximum of 10 basis points above London interbank offered rates. The facility will be a club deal, and management fees are not being disclosed.

County Bank and Crédit Lyonnais have been mandated by Centrale Nucléaire Européenne à Neutrons Rapides, the nuclear energy agency owned by European electricity companies including Electricité de France, for a \$125m loan with a spread of 1/2 point above Libor for the first three years and 3/4 for the remaining seven years.

Siemens, the industrial group, is the first West German borrower to

arrange a Euro-commercial paper programme without a backup credit facility. The company has appointed Deutsche Bank Capital Markets and Morgan Guaranty as dealers for a \$100m Euro-programme.

PepsiCo, the US drinks manufacturer, is also planning a substantial Eurocommercial paper programme of no fixed size through Salomon Brothers International, Swiss Bank Corporation International and Union Bank of Switzerland (Securities).

Mr Jiri Huebner, an executive director at Chase Manhattan in London and a well-known figure in the Euromarkets, is leaving Chase to join Credit Suisse First Boston. He will be a director of CSFB on the banking side and will be based eventually in New York. He is ex-

**EUROMARKET TURNOVER**  
 Turnover (\$bn)

Primary Market	Securities	Com	FRN	Other
US\$	1,777.5	1.7	686.0	191.0
Yen	3,110.7	138.2	477.3	174.1
Other	419.3	0.3	438.2	37.7
Yen	708.5	24.7	132.7	82.7

Secondary Market	Securities	Com	FRN	Other
US\$	10,402.7	828.1	8,801.6	1,688.4
Yen	13,108.5	774.8	8,800.5	2,008.8
Other	2,714.2	16.3	173.1	1,583.3
Yen	2,287.5	148.3	1,851.8	1,371.4

Cash	Securities	Total
US\$	8,263.9	15,712.5
Yen	7,402.8	20,985.1
Other	3,167.1	3,512.4
Yen	3,146.1	3,291.3

Week to January 2 1986 Source: AIBD

These Bonds having been sold outside the United States of America, this announcement appears as a matter of record only.

New Issue December 1985

**CHARTER MEDICAL CORPORATION**

**Swiss Francs 86 000 000**  
**6% Bonds 1985-1995**

**SODITC S.A.**

BA FINANZ (SCHWEIZ) AG  
 BANK HEUSSER & CIE AG  
 BANQUE PARIBAS (SUISSE) S.A.  
 CHASE MANHATTAN BANK (SWITZERLAND)  
 CRÉDIT DES BERGUES  
 MANUFACTURERS HANOVER (SUISSE) S.A.  
 SAMUEL MONTAGU (SUISSE) S.A.

AMRO BANK UND FINANZ  
 BANQUE GUTZWILLER, KURZ, BUNGENER S.A.  
 BANQUE PASCHE S.A.  
 COMPAGNIE DE BANQUE ET D'INVESTISSEMENTS, CBI  
 KREDIETBANK (SUISSE) S.A.  
 NIPPON KANGYO KAKUMARU (SUISSE) S.A.

Chemical Bank (Suisse)  
 LTCB (Schweiz) AG

Citicorp Bank (Switzerland)

BFC Banque Financière de la Cité  
 Bank Künzler AG  
 Bank Oppenheim Pierson (Schweiz) AG  
 Banque Bruxelles Lambert (Suisse) S.A.  
 Banque Kleinwort Benson SA  
 Banque Scandinave en Suisse  
 Canadian Imperial Bank of Commerce (Suisse) S.A.  
 Great Pacific Capital  
 Hottinger & Cie  
 The Royal Bank of Canada (Suisse)  
 Volksbank Willisau AG

Bank in Langnau  
 Bank Leumi le-Israeli (Schweiz)  
 Bankers Trust AG  
 Banque Indosuez, Succursales de Suisse  
 Banque de Participations et de Placements S.A.  
 Barclays Bank (Suisse) S.A.  
 Crédit Lyonnais Finanz AG Zürich  
 Grindlays Bank p.l.c.  
 Privat Kredit Bank  
 J. Henry Schroder Bank AG

Advisor to the Borrower:  
**DREXEL BURNHAM LAMBERT INCORPORATED, New York**

These bonds having been sold, this announcement appears as a matter of record only.

New Issue December 1985

**THE REPUBLIC OF ITALY**

**Zero Coupon Bonds of 1985, due 2005**  
**of Swiss Francs 300 000 000**

**SODITC S.A.**

Amro Bank und Finanz  
 Bank Heusser & Cie AG  
 Bank Oppenheim Pierson (Schweiz) AG  
 Banque Indosuez, Succursales de Suisse  
 Banque Pasche S.A.  
 Chemical Bank (Suisse)  
 Compagnie de Banque et d'Investissements, CBI  
 Kredietbank (Suisse) S.A.  
 Lloyds Bank International Ltd.  
 Nippon Kangyo Kakumaru (Suisse) S.A.  
 Nordfinanz-Bank Zürich  
 Turis AG, Finanz- und Verwaltungsgesellschaft (IMI Group)

BANQUE GUTZWILLER, KURZ, BUNGENER S.A.  
 BANCA COMMERCIALE ITALIANA (SUISSE)

Amro Bank und Finanz  
 Bank Heusser & Cie AG  
 Bank Oppenheim Pierson (Schweiz) AG  
 Banque Indosuez, Succursales de Suisse  
 Banque Pasche S.A.  
 Chemical Bank (Suisse)  
 Compagnie de Banque et d'Investissements, CBI  
 Kredietbank (Suisse) S.A.  
 Lloyds Bank International Ltd.  
 Nippon Kangyo Kakumaru (Suisse) S.A.  
 Nordfinanz-Bank Zürich  
 Turis AG, Finanz- und Verwaltungsgesellschaft (IMI Group)

Citicorp Bank (Switzerland)  
 Handelfinanz Midland Bank

American Express Bank (Switzerland) AG  
 BA Finanz (Schweiz) AG  
 Bank Leumi le-Israeli (Schweiz)  
 Bank of Tokyo (Schweiz) AG  
 Barclays Bank (Suisse) S.A.  
 Canadian Imperial Bank of Commerce (Suisse) S.A.  
 Chase Manhattan Bank (Switzerland)  
 Dai-ichi Kangyo Bank (Schweiz) AG  
 Delwa (Schweiz) Ltd.  
 First Chicago S.A.  
 Fuji Bank (Schweiz) AG  
 Lavoro Bank AG  
 LTCB (Schweiz) AG  
 Morgan Stanley S.A.  
 Nomura (Switzerland) Ltd.  
 Sumitomo International Finance AG  
 Sumitomo Trust Finance (Switzerland) Ltd.

Crédit Commercial de France (Suisse) S.A.  
 Samuel Montagu (Suisse) S.A.

Banque Nationale de Paris (Suisse) S.A.  
 Internationale Genossenschaftsbank AG  
 J. Henry Schroder Bank AG

Banca di Credito Commerciale e Mobiliare S.A.  
 Banca del Sempione  
 Banca Solari & Dhum S.A.  
 Bank in Huttwil  
 Bank in Ins  
 Bank Langenthal  
 Bank in Langnau  
 Bank Neumünster  
 Bank Rohrer AG  
 Banque de Dépôts et de Gestion  
 Banque Louis-Dreyfus en Suisse S.A.  
 Crédit Lyonnais Finanz AG Zürich  
 Great Pacific Capital  
 Grindlays Bank P.l.c.  
 E. Gutzwiler & Cie  
 Overland Trust Banca  
 Rüegg Bank AG  
 St. Gallische Creditanstalt  
 Società Bancaria Ticinese  
 Sotoburner Handelsbank  
 Spar- und Leihkasse Schaffhausen  
 Volksbank Willisau AG

Advisor:  
**FINEUROPE spa**



INTERNATIONAL CAPITAL MARKETS AND COMPANIES

Chris Sherwell and Wong Sulong on the pressures facing a Malaysian entrepreneur

A triple challenge for Tan Koon Swan

THERE IS A Chinese proverb of special relevance in these troubled times in Singapore and Malaysia. "You can be smart most of the time, but one stupid mistake can bring life-long ruin."

For Mr Tan Koon Swan, the Malaysian entrepreneur and politician, the stupid mistake, as he has confided to friends, was his involvement in Pan-Electric Industries, the Singapore marine salvage, hotel and property group now under threat of liquidation.

Pan-Electric was placed in receivership at the end of November with debts of S\$400m (US\$188m). The group in which Mr Tan has an indirect 22.6 per cent stake, could not meet commitments to buy S\$140m-worth of shares, many of them in Mr Tan's own listed companies, Grand United Holdings (GUTH) and Supreme Corporation.

Pan-Electric's problems quickly became a sensation because they threatened several broking firms and led to the unprecedented three-day closure of the Singapore and Kuala Lumpur Stock Exchanges. A lifeline was arranged in Singapore, and then a rescue plan for Pan-Electric was agreed between Mr Tan, the company's 37 bank creditors and Price Waterhouse, the appointed receivers.

According to Mr Tan's associates, the past two months have been "hell" for him. Apart from his corporate woes, he has had to fight to gain the leadership of the Malaysian Chinese Association, the largest Chinese political party. It was an important victory, since the

party had been riven by bitter infighting for 20 months. "There were times when he was acting like a zombie, shuttling daily between Kuala Lumpur and Singapore, attending endless meetings, appeasing accusing bankers and top civil servants, as well as making last-minute political deals to ensure his MCA victory. The stress was too much and he made a couple of inappropriate remarks which only increased nervousness and suspicion in Singapore towards him," said one of his associates.

In Malaysia, "TKS," as Mr Tan is commonly known, is widely regarded as a brilliant businessman with a strong loyalty to friends and commitment to the Chinese community. But in Singapore he is seen as a corporate juggler and a buccannier from up-country.

That he is still under considerable pressure, particularly from banks in Singapore, is indisputable. Last week he bought himself some time when the bulk of Pan-Electric's forward share purchase commitments were, as agreed, transferred to him personally. The Singapore and Malaysian brokers involved in the transactions in turn agreed to roll them over for another six months.

Next week, later than originally planned, he faces another difficult deadline under the agreement, to inject S\$8m cash into Pan-Electric beyond the S\$20m he has previously committed. After that, Price Waterhouse can still call on Mr Tan for another S\$12m, and there is considerable speculation whether the already



extended Mr Tan will be able to meet these obligations. Indeed, to many people it remains possible that both his business empire (if one can still describe it as that) and his newly acquired political authority will disintegrate. Others say that, with each passing day, his chances of surviving appear more hopeful.

The mantle he now wears as political leader of the 5m Malaysian Chinese is his biggest asset. The Chinese community has been demoralised by the MCA in-fighting, humiliated by its diminishing influence within the Malaysian Government and squeezed by a contracting economy.

Equally important is the fact that Mr Tan's corporate dealings and commitments are only

the tip of an iceberg of similar transactions built up by many entrepreneurs in Malaysia and Singapore. This fact is well appreciated by Mr Daim Zainuddin, the powerful Malaysian Finance Minister, who realises that the collapse of Mr Tan would almost certainly have a domino effect. Mr Daim himself is the strongest proponent of boosting the local stock market.

Mr Tan must now overcome three extremely difficult problems if he is to wind down his business interests and concentrate on politics. He has pledged: The financial restructuring of Pan-Electric; the discharge of his forward contract commitments; and the protection against outside predators of his listed companies.

He wants to raise a 100m ringgit (US\$41.5m) loan in the coming weeks to help meet the forward contracts as they mature. A large Chinese-controlled company is expected to make a loan stock issue, which would be underwritten by several prominent Chinese businessmen. The nationwide MCA network of 400,000 party members would be called upon to take up the paper, though they may take considerable persuading.

To raise further funds and to place GUTH and Supreme in friendly hands, he is negotiating with Umco, the investment arm of the Associated Chinese Chambers of Commerce and Industry, to take over a controlling stake in either company. Other business groups have also been

approached. These talks will take time and could break down over the crucial issue of price. GUTH and Supreme were suspended more than a month ago at 1.19 ringgit and 1.39 ringgit respectively, giving them market capitalisations of 271m ringgit and 557m ringgit.

Their real value, however, would be considerably less if the shares were allowed to be traded under present conditions. It is estimated that between 15 and 20 per cent of GUTH and Supreme shares are held by Singaporeans who might dump them at any price once they are relisted.

Mr Tan's close associates say the rescue of Pan-Electric continues to pose the most urgent problem, partly because of its huge debts, but largely because it is now under receivership. "It's never easy to negotiate a deal when 37 banks are involved, each scrambling to get whatever they can for themselves," said one Malaysian businessman. For their part, Pan-Electric's creditor banks say they will go along with Mr Tan as long as doing that offers the lesser risk, yet this is plainly a matter of faith.

Ultimately the banks, the broking firms and the Singapore authorities—together with Merrill Lynch and other brokerage companies which sold Baldwin securities, and which had filed in court to reindemnify claims.

As a result the brokers would withdraw their claims and any objections to the reorganisation plan, Baldwin said.

Court approves Baldwin agreements

By Our Financial Staff

BALDWIN-UNITED, the financial services group operating under Chapter 11 of the US Bankruptcy Code, has signed a series of agreements which, it says, clear main obstacles to its reorganisation plan.

The US Bankruptcy Court approved an agreement involving Baldwin companies, insurance regulators and banks settling claims relating to non-payment of more than \$500m in loans to Balmitt, a Baldwin subsidiary.

The loans were made in connection with Baldwin's purchase of MGIC, a mortgage insurance company, as part of an over-ambitious diversification plan. Manufacturers Hanover had previously raised objections to the reorganisation plan on behalf of the bank consortium.

Banks involved in the loans were paid on December 31 with proceeds from the sales of MGIC's mortgage guaranty and municipal bond businesses.

The court has also approved settlements between Baldwin and Merrill Lynch and other brokerage companies which sold Baldwin securities, and which had filed in court to reindemnify claims.

Icahn becomes TWA chairman after passing final hurdle

BY PAUL TAYLOR IN NEW YORK

MR CARL ICANH, the Wall Street investor, has become chairman of TWA, the struggling US airline, after overcoming a last-minute stumblingblock with the air carrier's pilots and winning management approval for a revised and scaled-down no-cash partial merger deal.

Under the terms of the final agreement, which comes seven months after Mr Icahn first launched his bid for TWA, Mr Icahn, who already owns 52 per cent of TWA's stock, will acquire up to half the remaining 24m outstanding common shares paying minority shareholders completely in preferred stock.

Mr Icahn had originally planned to acquire all the remaining outstanding shares for \$19.50 in cash and \$4.50 in preferred stock each. By not offering any cash to the final deal Mr Icahn and TWA should emerge with \$750m in cash available from planned financings being put together by Dresel Burnham Lambert, the Wall Street investment bank.

This cash could be crucially important to TWA which is expected to report a sizable fourth-quarter loss and a \$140m to \$150m full-year net loss. TWA also faces the prospect of a threatened strike by members of the independent federation of flight attendants - the only TWA

union which has so far not agreed wage and benefit concessions with Mr Icahn.

The Wall Street investor, who already had a seat on the six-member TWA board, became chairman after he won control with two supporters when two other board members resigned.

The two board members who quit will remain on a standing committee and continue to represent the interests of the remaining public shareholders with the right to review any merger or other transactions.

The agreement with the pilots union came after key negotiations over how seniority rights at TWA would be protected should TWA take over another airline or itself be acquired. Mr Icahn approached both Northwest Airlines and American Airlines earlier last year.

The pilots' agreement followed contract settlements with the International Association of Machinists and Aerospace Workers.

TWA, which has some of the highest labour costs in the US airline industry, has negotiated concessions totalling about \$150m a year, but Mr Icahn hopes to raise these savings to about \$300m a year by winning further concessions from flight attendants and non-union workers.

Chase in link with Cedel

BY ALEXANDER NICOLL

CHASE MANHATTAN Bank has joined forces with Cedel, the Luxembourg-based Euro-bond clearing house, to provide a same-day settlement service for issuing and trading Euro-commercial paper.

Quick settlement has been urgently needed to assist the development of the rapidly growing market in such securities—short-term notes issued by sovereign or corporate borrowers on the Euro-markets in a similar fashion to the vast US commercial paper market.

Euroclear, the rival Eurobond clearer based in Brussels, has also announced plans for same-day settlement of Euro-commercial

paper. Like the Chase/Cedel system, which takes effect immediately, it would avoid the costly and risky physical movement of paper. Chase and Cedel allow for same-day physical delivery if it is required.

The essence of the new system is that Chase's London branch has become the London depository for Cedel, which has some 1,500 investors as clients. Chase acts as issuing and paying agent for the Euro-securities.

Details of sales of paper to Cedel investors are processed and communicated through a direct computer link, enabling borrowers to receive funds on the day of issue.

Gotthard Bank Lugano ahead

By John Wicks in Zurich

NET PROFITS of Gotthard Bank, Lugano rose by 17 per cent last year to SFr 34m (\$16.4m) following an 8 per cent rise in the balance sheet total to almost SFr 4.5bn.

The Japanese-controlled bank, traditionally the first Swiss bank to announce its annual results, booked a jump in gross earnings for 1985 from SFr 71.3m to SFr 110.5m.

This includes an extraordinary dividend of SFr 40m paid to the Lugano bank by its Bahamas subsidiary Gotthard Bank International,

Further suit in UPI battle

UNITED PRESS INTERNATIONAL said plans for a Mexican publisher and Texan builder to take over the news agency were moving ahead despite a \$975m damage suit filed by a rival group of bidders, Reuter reports from Washington.

Financial News Network, a New York communications company, alleged in a suit filed in a district court last week that the winning bidders had conspired with executives at UPI to foil what it claimed was its superior offer.

UPI announced last month that it had accepted the \$41m bid of Mr Mario Vazquez Rana, publisher of Mexico's El Sol

newspapers, and Mr Joe Russo, a Houston real estate developer. Mr Vazquez Rana has pledged to take the news agency out of bankruptcy code protection and restore it to profitability.

In accepting the Vazquez Rana bid, UPI said the Financial News Network offer, made on behalf of itself and six other investors, had failed to meet a November 12 deadline.

The agency refused comment on the suit beyond saying, "There are many law suits pending between the various parties involved in UPI's acquisition, and it is not surprising to learn there is another one."

NEW INTERNATIONAL BOND ISSUES

Borrower	Amount m.	Maturity	Av. life years	Coupon %	Price	Bank Referee	Offer yield %
U.S. DOLLARS							
IFC** †	50	1996	10	8 1/4	98 1/2	ISJ Int.	8.270
SWCS ‡	50	1991	5	(b)	100	Merrill Lynch	-
SWISS FRANCS							
TNT Ltd. †	300 max	1998	-	(4%)	(100)	Soditic	-
EX Capital (c) ‡	180	2001	-	(5%)	-	Bpa Gutzwiller, Kurz, B.	-
GIULIENI							
Security Pacific (a) † ‡	250	1996	10	7 1/4	100	Amer Bank	-
World Bank †	500	1983	7	8 1/2	99 1/4	ABN	6.837
NORWEGIAN KRONER							
City of Oslo	200	1996	7 1/2	10	-	Union Bk of Norway	-
LUXEMBOURG FRANCS							
Swedish Export C.** † ‡	300	1991	5	8 1/4	100	BNL	8.700
YEN							
Daewoo Pacific †	10bn	1998	10	8 1/4	101	Yamaichi Int. (Eor)	6.610
Ford Motor Credit †	25bn	1991	5	8 1/4	101 1/4	Nikko Secs. (Europe)	6.600

\* Not yet priced. † Final terms. \*\* Private placement. ‡ Convertible. † Floating rate note. ‡ With equity warrants. † With bond warrants. † Deal currency. (a) 1/4 year less than 1 year, maximum coupon 8%. (b) Unlisted. Equal to 3m Libor, additional \$25m top. (c) Collateralized debt convertible. Note: Yields are calculated on ABSX basis.

This announcement appears as a matter of record only.

DECEMBER 1985

U.S. \$100,000,000

**Hawley International Finance Limited**

Revolving Multicurrency Transferable Advances Facility

Guaranteed by

**Hawley Group Limited**

Arranged by

**Credit Suisse First Boston Limited**

Funds provided by

Allied Irish Banks plc	Arab Bank Limited	Banque Française du Commerce Extérieur London Branch
Barclays Merchant Bank Limited	Citibank, N.A.	Commonwealth Bank of Australia
Credit Lyonnais	Credit Suisse	Credit Suisse First Boston Limited
Dresdner Bank Aktiengesellschaft London Branch	London Interstate Bank Limited	National Bank of Canada
The Rural and Industries Bank of Western Australia	The Sanwa Bank, Ltd.	S.F.E. Bank Limited
Société Générale London Branch	State Bank of New South Wales	Union Bank of Finland Ltd London Branch

Facility Agent

**Credit Suisse First Boston Limited**

This announcement appears as a matter of record only.

**Bahrain Middle East Bank (E.C.)**

U.S.\$35,000,000

Transferable Revolving Underwriting Facility

for the Issuance of

**Short-Term Negotiable Bearer Certificates of Deposit**

Arranged by

**Merrill Lynch Capital Markets**

Lead Managing Underwriter

**Burgan Bank S.A.K. - Kuwait**

Managing Underwriters

**Amagerbanken**      **Bank of Bahrain and Kuwait B.S.C.**      **National Bank of Abu Dhabi**

Co-Managing Underwriters

**Kuwait International Investment Co. s.a.k.**

Arab Banking Corporation (ABC)      **Alahli Bank of Kuwait K.S.C.**

**Banco Atlantico S.A.**      **Banco Saudi Espanol, S.A. ("Saudebank")**

**Industrial and Commercial Bank Limited**      **UBAF Arab American Bank**

**Frab Bank (Middle East) E.C.**      **Kuwaiti-French Bank**

Principal Placing Agent

**Merrill Lynch Capital Markets**

December 1985

هكنا من الأهرل



INTERNATIONAL CAPITAL MARKETS

US MONEY AND CREDIT

Sentiment still bullish despite year-end pressures

US BOND prices moved relatively little during generally lacklustre trading over the two-week holiday period.

The "hangover" holiday trading provided a relatively rare lull in the recent hectic pace of market activity...

Perhaps the most significant market feature was how well prices held up in spite of the continued absence of a discount rate cut...

In the Government bond market prices closed slightly lower on the week...

US MONEY MARKET RATES (%) table with columns for instrument, last week, 1 week ago, 4 weeks ago, and 12-month high/low.

US BOND PRICES AND YIELDS table with columns for instrument, last change, 1 week ago, 4 weeks ago, and 12-month high/low.

The price declines of 1/8 to 1/4 points were largely explained up to an average of almost 13.5 per cent.

dence of traditional year-end window dressing and a scramble for funds at the end of a reserve maintenance period...

The unexpectedly large increase in Treasury balances could have further repercussions.

The price declines of 1/8 to 1/4 points were largely explained up to an average of almost 13.5 per cent.

both seasonal reserve pressures, which normally appear in the latter part of this month...

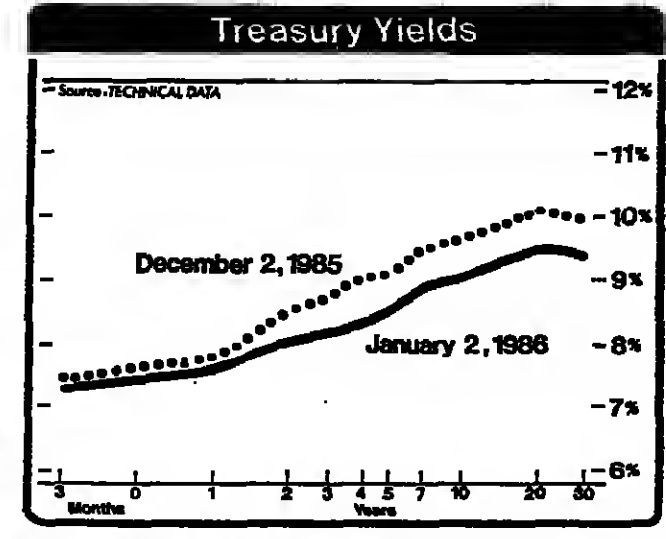
Such revisions could have important consequences for market participants in the intermediate term.

Underpinning the still general positive sentiment of the market are the latest economic figures...

leading economic indicators showed a smaller than expected gain. First indications are that Christmas retail sales lacked sparkle...

Heading these will be the Treasury auctions of seven- and 20-year securities tomorrow and Wednesday.

The bond market's other watershed eye will be on the money markets.



and the prospect that the US monetary authorities are likely to further de-emphasise M1 and perhaps place greater weight on the better-behaved M2.

In the US corporate bond markets a bumper year went out with a bit of a whimper in very quiet trading.

Despite the inevitable lull in new issue volume the December total hit an unprecedented \$15.8bn, according to Salomon Brothers figures.

Paul Taylor

FT/AIBD INTERNATIONAL BOND SERVICE

Table of international bond yields and prices for various countries including US Dollar, Swiss Franc, and others.

Table of international bond yields and prices for various countries including Yen Straights, Euro Straights, and others.

Table of international bond yields and prices for various countries including Sterling Straights, Australian Dollar, and others.

UK GILTS

Under an oil price shadow

The gilt-edged market enters 1986 obsessed by a single concern: the future of oil prices.

Friday when the Treasury announced the largest monthly increase in foreign currency reserves for three years.

are also some bulls breaking cover. Mike Higgins of W. Greenwell says the outlook for gilts during the early part of the year could be "very bullish indeed."

It is more than possible, however, that the UK could fail to benefit much from multilateral interest rate cuts.

Malcolm Roberts, the chief economist at Laing and Cruickshank, is another analyst sensitive to the bullish undertone of the market.

Ashton Mining Limited U.S.\$ 50,000,000 Revolving Underwriting Facility advertisement with logos and contact information for S.G. Warburg & Co. Ltd.

Table of international bond yields and prices for various countries including Floating Rate, Euro, and others.

STRAIGHT BONDS: Yield to redemption of the mid-price. Amount issued in millions of dollars unless otherwise indicated.



UK COMPANY NEWS

RECENT ISSUES

FNFC rises 25% and returns to dividend list

First National Finance Corporation, the consumer credit, lending and property concern, saw profits increase by 25 per cent to a record £22.07m in the 1984/85 year...

comment

With the remaining £28m lent by the Bank of England support group now repaid, First National relative stability in trading conditions.

SHARE STAKES

Changes in company share stakes announced over the past week include: Cambium Venture Capital - H. J. Baldwin, director, has disposed of his holding of 229,477 ordinary shares.

BOARD MEETINGS

Table with columns: TODAY, FUTURE DATES, Company Name, Meeting Date, Location.

Application has been made to the Council of The Stock Exchange for up to 363,056 new free A-shares of FIM 20 each in Amer Group Limited to be admitted to the Official List.



AMER GROUP LTD SHARE ISSUE

6th JANUARY to 28th FEBRUARY 1986 NOTICE TO HOLDERS OF FREE A-SHARES

Annual General Meeting. At the Annual General Meeting of the Company on 20th December 1985 the shareholders agreed to increase the share capital of the Company from FIM 144,957,560 and to authorise the Directors to issue new shares, each with a nominal value of FIM 20, by means of:-

Beazer set to raise French Kier offer

C. H. Beazer, the fast-growing housebuilding group, is expected this week to unveil an improved and final offer for French Kier, the construction company...

H. J. Baldwin ahead at six months

Taxable profits at H. J. Baldwin, clay and concrete manufacturer, increased from £48,736 to £55,130 in the six months to October 31 1985 on turnover up to £1,024 to £1,431m.

LEISURE INVESTMENTS rights has been subscribed

LEISURE INVESTMENTS rights has been subscribed at £1.00 per share (9.84 per cent), and the balance has been sold in the market at 30p each.

Refuge Group has successful year

A SUCCESSFUL year for new life and pensions business is reported by the Refuge Group in 1985. In the Ordinary branch, new annual premiums rose marginally from £2.91m to £3m in the year when this sector of the life market was dull.

Ensign Trust purchase

Ensign Trust, formerly Murray Growth, which is controlled by Merchant Navy Officers Pension Investments, is paying £800,000 (£250,000) for a further £2,000,000 in First Colonial Bankshares Corporation of Chicago.

Offer for Sangers Photo lapses

Mr Jeremy Peace's formal offer for Sangers Photographic, the USM-quoted group, received no acceptance and has been allowed to lapse.

Brent Chemicals

Brent Chemicals International is paying up to £176,200 for Chemie, a company manufacturing chemical products for the paint and decorative industry.

F.T. Share Information

The following securities have been added to the Share Information Service, Cheeshire Wholesale Food (Section: Food, Groceries); Chuangs (Electricals); Derwent Valley (Property); Kaiduk (Trusts, Finance Land); Skandwick (Paper, Printing, Advertising); Toyer Kemley and Millbourne Pipe Clay Camry (Overseas Traders); World of Leather (Drapery and Stores).

COMPANY NEWS IN BRIEF

WYNDHAM GROUP, the engineering and property company, has increased pre-tax profits by 25 per cent to £1.6m in the six months to the end of September 1985, on turnover up from £647,000 to £798,000. The result, at £48,000 against £33,000, makes the directors confident for the full year outcome, and also allows the payment of an interim dividend of 0.8p per share next April.

CPS COMPUTER GROUP has sold Lames Computing Services and Lames Commercial Computing to 3X Systems for a consideration which is said to be £1.5m. The deal also transfers to 3X Systems, which is quoted on the USM, all assets of CPS, which is quoted on the USM, as at the end of September 1984.

WEEKS PETROLEUM has sold its interest in exploration permit for petroleum N7/E2, offshore Australia, to Peko Oil and Kimberley Oil and Gas NL. C. E. HEATH has completed the divestment of the Lloyds underwriting agency, C. E. Heath and Co (Underwriting) by way of management buyout.

PALMSTON INVESTMENT TRUST has exchanged contracts to acquire a freehold property at Leyland, Lancs, for £740,000 and financed by bank borrowings. The property comprises office accommodation let on a 20-year term from 1984.

COMMUNITIES RESEARCH Unit (Holdings), a business consultant to the international metals and minerals industry, has acquired a 60 per cent stake in the British Sulphur Corporation, a consultant to the international fertilizer and allied chemical industry.

CENTRAL BANK OF NIGERIA FLOATING TO BE ISSUED IN RESPECT OF OUTSTANDING TRADE DEBT

Phillips & Drew (Trading) Ltd Phillips & Drew are pleased to announce that they are now able to offer a market making service through their International Dealer operation:

Please see page 3 of today's Financial Times for details

Granville & Co. Limited

Table with columns: Capitalism, Company, Price, Change, G.M. Yield, P/E, Fully Accr. Dividend.

Table with columns: Stock, 1985/6 High, Low, 1984/5 High, Low, Div., Yield, etc.

FIXED INTEREST STOCKS

Table with columns: Issue Price, Annual Interest, Maturity Date, Stock, Yield, etc.

RIGHTS OFFERS

Table with columns: Issue Price, Latest Announcement Date, 1985/6 High, Low, Stock, Yield, etc.

Announcement date usually last day for dealing free of stamp duty. Figures based on prospectus estimates. Assumed dividend and yield. Forecast dividend cover as indicated by latest interim statement. H. Dividend and Yield based on prospectus or other official statement for 1985. 1. Indicated dividend cover relates to previous dividend; p/a ratio based on latest annual earnings. 2. Forecast dividend cover. 3. Issued by way of capitalisation. 4. Placing price. 5. Issued in connection with incorporation (transfer or takeover). 6. Issued in connection with takeover. 7. Issued under Rule 235 (5) (a). 8. Units comprising five ordinary and one warrant. 9. Units comprising 12 preference shares and one warrant.

PENDING DIVIDENDS

Table with columns: Date, Announcement Date, Date, Announcement Date.

BANK RETURN

Table with columns: Department, Tuesday December 31, 1985, Increase (+) or decrease (-) for week.

ISSUE DEPARTMENT

Table with columns: LIABILITIES, ASSETS, Notes in circulation, Notes in Banking Department, Government Debt, Other Government Securities, Other Securities.

CORRECTION NOTICE US\$ 200,000,000 CONTINENTAL ILLINOIS OVERSEAS FINANCE CORPORATION N.V. GUARANTEED FLOATING RATE SUBORDINATED NOTES DUE 1994



# Yes, you've told us how badly Distillers is run, but what makes you think you could do better Mr. Gulliver?

**GULLIVER** The changes that are necessary at Distillers are so far reaching, they can only be introduced from the outside. We've done this already with a similar company - Allied Suppliers, which we bought in June 1982.

They were, in some respects, the "Distillers" of the grocery trade, a very large company that had grown by amalgamations, but whose market share had been sliding downhill for years. People expressed doubt whether Allied's business could be improved.

Profits last year were 240% of profits three years ago. Our share price has more than doubled in the last 18 months.

**QUESTION** *But Distillers' stock market value is 2½ times Argyll's. Aren't you biting off more than you can chew?*

**GULLIVER** No. Allied Suppliers was also 2½ times our size when we bought them. Yet we started to produce improved results almost straight away.

Nearly all Argyll Foods management are from Allied Suppliers. We provide the strategy and direction; they run the business. In the same way, we will identify the existing skills in Distillers, and give their management the leadership they require.

**QUESTION** *Your reputation has been made in the fast-moving retail trade. How does this qualify you to nurture famous whisky brands?*

**GULLIVER** Our prime skills are in marketing and in general management. These skills can both be applied to diverse businesses. Our record proves this. Our senior executives have backgrounds in companies like Unilever, Procter & Gamble, Mars, and Beecham: some of the most successful marketing companies in the world. We understand long-term business building and world brand marketing. It is this kind of marketing skill that we will bring to Distillers.

But more importantly, we will bring the strategy and direction required to build Distillers into an international drinks business with a much broader base.

**QUESTION** *You claim to be able to revitalise Distillers. But how successful is your own Argyll drinks business?*

**GULLIVER** How do you measure success? We've taken our drinks business from £100,000 profit in 1980 to over £10 million profit last year. Return on shareholders' funds has increased from 3% to 34%.

Last year, Distillers Company (Home Trade) showed £0.5 million profit on their sales of £121 million. We made £1.3 million profit on our home trade sales of just £30 million. If we could do that when our lead product is a regional rum, imagine what we could do with the famous names like Haig, Dewar's and Johnnie Walker.

**QUESTION** *You've run businesses in Britain. But what do you know about international markets?*

**GULLIVER** I have had direct experience in North America since 1971, when I became responsible for retail interests there, in addition to being Chairman and Chief Executive of Fine Fare here.

In 1982 we bought Barton Brands, a Chicago based drinks company, and built upon their traditional business of bourbon and Scotch whisky. For instance, we developed Corona Extra, making it the fastest growing imported beer in the United States.

Distillers make a lot of their performance in the United States. But it has all been achieved by local distributors, not by them. It wasn't till 1984 that they decided to buy one of these distributors, paying some \$250 million mainly for the right to distribute their own brands.

**QUESTION** *Argyll has achieved its growth by acquiring companies - How do you answer that?*

**GULLIVER** We have a reputation for making good acquisitions, but our profits come from making these prosper. For instance, in our food business, since 1982 we've increased profits from £18 million to £44 million - with only £2 million of this resulting from acquisitions.

**QUESTION** *It is said you not only buy companies - but you also sell them.*

**GULLIVER** In the past 4 years we've sold peripheral activities for a sum of £17 million. That represents only 2% of the current market value of the Argyll Group.

Looking at Distillers, we don't see why they need seven prestigious offices in London's West End. We may sell some of those. But we certainly won't be selling any of Distillers' valuable brands or businesses. We want to build up Distillers' business - not take it apart.

**QUESTION** *What makes you so confident you will make money for Distillers' shareholders?*

**GULLIVER** Because it will be in the interests of our management to achieve this. Argyll directors are committed to our company's success. We own a total of £27 million worth of shares in Argyll and 180 of our senior management participate in a stock option scheme, with an average of 30,000 shares each. We all have a very powerful motivation to succeed - as will Distillers' executives with our management.

**QUESTION** *Shareholders are being bombarded with circulars. Is there to be any let up?*

**GULLIVER** The shareholders have my sympathy. But we hope soon to be able to reduce these mailings to two a year - telling Distillers' shareholders about their dividends and earnings.

**Argyll. We can revive Distillers' spirits.**



WORLD STOCK MARKETS

Indices

NEW YORK DOW JONES 1985-86 High Low Since Comp'n

STANDARD AND POORS 1985-86 High Low Since Comp'n

N.Y.S.E. ALL COMMON 1985-86 High Low Since Comp'n

TORONTO 1985-86 High Low Since Comp'n

MONTREAL 1985-86 High Low Since Comp'n

NEW YORK ACTIVE STOCKS

AUSTRIA 1985-86 High Low Price

GERMANY 1985-86 High Low Price

BELGIUM/LUXEMBOURG 1985-86 High Low Price

DENMARK 1985-86 High Low Price

FRANCE 1985-86 High Low Price

NETHERLANDS 1985-86 High Low Price

SWITZERLAND 1985-86 High Low Price

SINGAPORE 1985-86 High Low Price

AUSTRALIA 1985-86 High Low Price

BREITLUND 1985-86 High Low Price

FRANCE 1985-86 High Low Price

GERMANY 1985-86 High Low Price

HONG KONG 1985-86 High Low Price

ITALY 1985-86 High Low Price

JAPAN 1985-86 High Low Price

METALLS 1985-86 High Low Price

NORWAY 1985-86 High Low Price

SWEDEN 1985-86 High Low Price

SWITZERLAND 1985-86 High Low Price

WORLD 1985-86 High Low Price

HONG KONG 1985-86 High Low Price

NETHERLANDS 1985-86 High Low Price

SWEDEN 1985-86 High Low Price

SWITZERLAND 1985-86 High Low Price

SINGAPORE 1985-86 High Low Price

NETHERLANDS 1985-86 High Low Price

SINGAPORE 1985-86 High Low Price

NETHERLANDS 1985-86 High Low Price

CANADA

CANADA TORONTO Closing prices January 3

OVER-THE-COUNTER Nasdaq national market, closing prices, January 3

OVER-THE-COUNTER Stock Sales High Low Last Day

"What's special about these Danish companies?"

They are all regular readers of the FINANCIAL TIMES • European Edition



INTERNATIONAL APPOINTMENTS

Gould splits role of chief executive and chairman

BY DONALD MACLEAN

GOULD, the US electronics concern, has split the role of chairman from that of chief executive. Mr James F. McDonald, aged 47, who has been chief operating officer of Gould since 1984, is to take over from Mr William T. Yivasker, as chief executive at the company's annual meeting on April 29.

Mr Yivasker, 61, who has been chief executive of the Illinois-based company since 1967, and has taken what was a better maker into electronics and out of electronics into electronics, is to remain chairman, and to be chairman of the executive committee.



Mr James F. McDonald (left) is to be chief executive of Gould, while Mr William T. Yivasker remains chairman

IFC puts in Kreuter in Paris

By Our Financial Staff

INTERNATIONAL FINANCE CORPORATION (IFC) has appointed Mr Gunter H. Kreuter special representative in its Paris office.

As head in Paris, Mr Kreuter will have the tasks of identifying and developing relations with the European corporate sector, and liaison with the corporation's investment departments in Washington. The establishment of the position is part of an intensification of the corporation's promotional efforts in Europe.

IFC, the affiliate of the World Bank, is in turn an affiliate of the International Monetary Fund, an agency specialising in project financing and developing countries, providing private enterprises with equity participations, long-term financing without government guarantees, and technical assistance.

Johnson broadens role at Caltex Petroleum

BY OUR FINANCIAL STAFF

CALTEX Petroleum Corporation has announced that Mr Raymond F. Johnson, its president, has been elected to the additional positions of chairman and chief executive officer, effective March 1, when Mr Howard V. Yergin, Jr, retires.

The company, which is jointly owned by Chevron Corporation and Texaco, says that Mr Seymour S. Miller, senior vice president, will assume the new post of vice chairman.

Move round for Syntex

SYNTEX CORPORATION, the Californian health care company, has elected Mr Richard P. Powers vice president and chief financial officer.

Mr Powers succeeds Mr William Goetz, who has been named president of Syntex subsidiary, Syntex's diagnostics subsidiary.

Mr Powers, 44, joined Syntex in 1981 as vice president and controller. Earlier this year he

Gitner ahead in Texas Air

TEXAS Air Corporation announces that Mr L. Gitner has been elected president, and to member of the board, reports AP-DJ from Houston.

Mr Frank Lorenzo, who has been president, becomes chairman and chief executive officer. Mr Gitner will be chairman of Pan Am Corporation and Pan American World Airways, as well as chief executive officer of Pan American World Services.

Mr Gitner spent six years with Texas International Airlines, a carrier merged into Continental Airlines in 1982, which along with New York Air is controlled by Texas Air. He left Texas International as senior vice president of marketing and planning in 1980 to co-found and be president of People Express Airlines.

Prior to working for Texas International, Mr Gitner worked at Trans World Airlines, from 1968 to 1974.

Bond in an Apollo change

APOLLO COMPUTER has named Mr Richard P. Bond as senior vice president, chief financial officer and general manager of the finance and administration group, the Chelmsford, Mass. concern announces.

Mr Bond was most recently chief financial officer at Stauder Chemical Company. He replaces Mr David G. Lubrano who resigned his post to pursue personal interests in venture capital, but who will remain a consultant to the company.

Caltex also announces that Mr Harold R. G. Wiggins, vice president, Finance, becomes senior vice president and a director on March 1. Messrs Johnson, Miller and Wiggins will comprise the company's executive committee.

Mick at HCA

HOSPITAL CORPORATION OF AMERICA has named Mr Roger E. Mick as its new president and chief financial officer, with effect from January 1.

Mr Mick will succeed Mr Sam A. Brooks, who is resigning to pursue his own business interests, but will be available to the company as a consultant.

UK APPOINTMENTS

Managing director at AMEC Group

Mr Rudl Klades has been appointed a director of AMEC and managing director of AMEC International Construction, overseas contracting arm of the group. His previous experience includes 10 years with Netherlands Airport Consultants (NACO) managing the South American and Middle-East activities. More recently he was managing director of his own consultancy.

TOUCHE REYNOLDS AND CO has appointed Mr M. J. Wait, a director, as manager of TR Pacific Basin Investment Trust.

Mr John Coles, Mr Keith Hann and Mr Toby Mounford have been appointed directors of STREETS FINANCIAL.

Mr Ian Edward Donevan has been appointed a member of the CIVIL AVIATION AUTHORITY. He will be group director responsible for financial and central services, for a five-year term from January 1. Mr Donevan joined the Authority last March when he was appointed controller, finance and planning. He was finance director and company secretary at Lloyds Bank from 1982 until his appointment to the CAA.

The following have been appointed directors of ALEXANDER HOWDEN AND BECK, the Lloyd's members' agency of Alexander Howden Group: Mr N. J. Robson (chairman), Mr C. F. Turner (managing director), Mr J. A. Segurds Jr, Mr R. A. Lee, Ms Fiona Fellman, Mr G. G. Ross, Mr R. P. Thompson (secretary) and Mr A. E. Williams.

Mr Frank McLoughlin and Mr Stuart J. Desjardis have joined the board of JOHN LAING CONSTRUCTION. Mr McLoughlin is responsible for certain building activities throughout the UK and Mr Desjardis is director responsible for the civil engineering division. Mr G. Oliver Whitehead has become chairman of John Laing International. Mr Peter R. Leamy has joined the board of Leamy Management Contracting.

RABONE CHESTERMAN has appointed Mr Tom Donoghue as director. He was export manager, Land Rover parts and equipment. Rabone Chesterman is a member of Bardsley.

Mr Robert Way has been appointed a director of DUNCAN LAWRIE.

LYNDOE (HOLDINGS) has appointed Mr Selam Mitchell as director of financial resources, replacing Mr Alan Taylor, who becomes a non-executive director. Mr Mitchell was formerly

with Deloitte Haskin & Sell before moving into country practice in partnership with Norman, Kier & Ashby of Tudbridge Wells.

STEEL BROTHERS HOLDINGS has appointed Mr J. E. B. Mackenzie as managing director in succession to Mr A. P. F. Macleod.

Captain Peter Hunt has been appointed head of safety services at BRITISH AIRWAYS. Since 1981 he has been head of technical and training flight crew, a position he will continue to hold until his successor has been appointed. Captain Jack Jessop, director of safety services, has retired. He will remain a non-executive board member of British Airways and has taken over the chairmanship of the British Airways board safety review committee from January 1.

Mr David Gilbertson has joined the board of METAL BULLETIN CONFERENCE. Mr Gilbertson will remain in his position in addition to continuing as non-executive editor of Metal Bulletin.

Mr A. W. Pickup has been appointed financial director of STUART EDGAR following two years as company secretary.

PANNELL KERR FORSTER has appointed Mr Robert Hawkins as a partner in the Great Yarmouth and Norwich practice.

Mr Keith Helme has joined WHITTINGDALE as executive director responsible for the development of personal investment services. He steps down from the main board of Merricks, but remains a consultant.

JARDINE INSURANCE BROKERS has made the following appointments: Mr J. Monroe has been appointed a director of the non-marine division, and Mr E. L. Wetherall a director of the financial and technical services division of Jardine Thompson Graham. The marine division of Jardine (Glasgow) is being sold. Following appointments: Mr K. R. Alston, Mr A. N. Read and Mr M. O'Donnell have become divisional directors. Mr J. East, Mr J. E. Hayes, Mr N. H. T. Riddle and Mr C. B. Whiteway have been made associate directors.

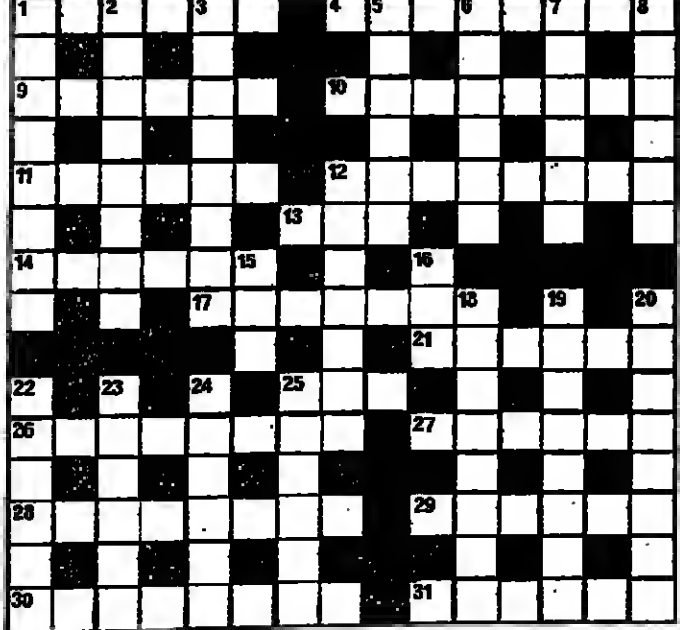
The following appointments have been made to the board of GODSELL, ASTLEY & PEARCE (FOREIGN EXCHANGE): Mr J. G. O'Neill, chairman; Mr P. Johnston, managing director; Mr F. R. Clarke, deputy managing director; Mr I. Lumley-Kelly and Mr R. A. Schneider, directors.

FT UNIT TRUST INFORMATION SERVICE

Table listing various unit trusts and their performance metrics, including columns for trust names, managers, and financial data.

FOCUS ON SOUTH AFRICA SERIES. A special advertising series featuring companies involved in South Africa commerce and industry. Includes contact information for KLUH SUTTON.

F.T. CROSSWORD PUZZLE No. 5914



- ACROSS: 1 Bill in America has a way with old clothing (6); 4 Royal nipper is well protected in the water (4,4); 9 What is missing is the French copper—not available (6); 10 Agreement to marry next worshippier (8); 11 She is in order; rest is not in order (6); 12 Break can be seen in broken singer (8); 13 Person showing energy (3); 14 One of several disturbances dramatically linked with excursions (6); 17 Does it mean there is no conflict between US and China? (7); 21 Yard is pursuing ring responsible for forgery (6); 25 Ambassador and wife cut down (5); 26 The copper keeping her away from the French was a hard worker (8); 27 Presses on quickly to be included among selected players (6); 28 Careless mistakes by carrier (8); 29 Trick is to catch one's breath (6); 30 Drawing on an unknown desire (8); 31 Witness present during experiment (6).

- DOWN: 1 Adaptation of last main work written by Scott (6); 2 Where defenders go for a meal when they retire? (4,4); 3 Athlete takes leading position for a second (6-2); 5 One must have nothing to eat: this will prevent contamination (6); 6 That girl rocks all over the place (6); 7 Circular nut turns over the shaft (6); 8 Spiked by counterplot? (6); 12 Provides stimulation since it is different (7); 15 Drive up to ruin (3); 16 Aware of the trend to start cheering (3); 18 Used to make the greens and potatoes pliant (4,4); 19 Go in front of stake to surrender (8); 20 Surveys abandoned by order of the military (4,4); 22 Why there's a lot of risk in alcohol? (6); 23 Circulation of air can be applied to bruises (6); 24 Bread's width determines type of gas burner (6); 25 Leading lady is not finished with drug (6). The solution to last Saturday's prize puzzle will be published with names of winners next Saturday.

CONTINUED OVERLEAF



AUTHORISED UNIT TRUSTS & INSURANCES

Main table listing various unit trusts and insurance companies with columns for name, address, and financial data.

Handwritten text at the bottom center of the page.



INSURANCE, OVERSEAS & MONEY FUNDS

Table of financial data for various insurance and overseas funds, including company names, fund names, and numerical values.

Main table of financial data for insurance, overseas, and money funds, listing numerous fund names and their corresponding values.

Table of financial data for money market bank accounts, listing various bank account types and their values.

Money Market Bank Accounts

Money Market Bank Accounts

NOTES

OPTIONS

Table of options data, including 3-month call rates and other option-related information.



BRITISH FUNDS

Table of British Funds with columns for Name, Price, Last, Div, Yield, and % Chg. Includes sections for 'Shorts' (Lives up to Five Years), 'Five to Fifteen Years', and 'Over Fifteen Years'.

INDEX-LINKED

Table of Index-Linked funds with columns for Name, Price, Last, Div, Yield, and % Chg.

INT. BANK AND OSEAS GOVT STERLING ISSUES

Table of International Bank and Overseas Government Sterling Issues with columns for Name, Price, Last, Div, Yield, and % Chg.

CORPORATION LOANS

Table of Corporation Loans with columns for Name, Price, Last, Div, Yield, and % Chg.

COMMONWEALTH & AFRICAN LOANS

Table of Commonwealth and African Loans with columns for Name, Price, Last, Div, Yield, and % Chg.

LOANS

Table of Loans with columns for Name, Price, Last, Div, Yield, and % Chg.

Public Board and Ind.

Table of Public Board and Industrial funds with columns for Name, Price, Last, Div, Yield, and % Chg.

FOREIGN BONDS & RAILS

Table of Foreign Bonds and Rails with columns for Name, Price, Last, Div, Yield, and % Chg.

AMERICANS

Table of American funds with columns for Name, Price, Last, Div, Yield, and % Chg.

AMERICANS - Cont.

Continuation of American funds table with columns for Name, Price, Last, Div, Yield, and % Chg.

CANADIANS

Table of Canadian funds with columns for Name, Price, Last, Div, Yield, and % Chg.

BANKS, HP & LEASING

Table of Banks, Home Production, and Leasing funds with columns for Name, Price, Last, Div, Yield, and % Chg.

BEERS, WINES & SPIRITS

Table of Beers, Wines, and Spirits funds with columns for Name, Price, Last, Div, Yield, and % Chg.

BUILDING, TIMBER, ROADS

Table of Building, Timber, and Roads funds with columns for Name, Price, Last, Div, Yield, and % Chg.

DRAPERY & STORES

Table of Drapery and Stores funds with columns for Name, Price, Last, Div, Yield, and % Chg.

ENGINEERING

Table of Engineering funds with columns for Name, Price, Last, Div, Yield, and % Chg.

INDUSTRIALS

Table of Industrial funds with columns for Name, Price, Last, Div, Yield, and % Chg.

HOTELS AND CATERERS

Table of Hotels and Caterers funds with columns for Name, Price, Last, Div, Yield, and % Chg.

AMERICANS - Cont.

Continuation of American funds table with columns for Name, Price, Last, Div, Yield, and % Chg.

LONDON SHARE SERVICE

BUILDING, TIMBER, ROADS - Cont.

Continuation of Building, Timber, and Roads share list with columns for Name, Price, Last, Div, Yield, and % Chg.

DRAPERY & STORES - Cont.

Continuation of Drapery and Stores share list with columns for Name, Price, Last, Div, Yield, and % Chg.

ELECTRICALS

Table of Electrical share list with columns for Name, Price, Last, Div, Yield, and % Chg.

CHEMICALS, PLASTICS

Table of Chemicals and Plastics share list with columns for Name, Price, Last, Div, Yield, and % Chg.

DRAPERY & STORES

Table of Drapery and Stores share list with columns for Name, Price, Last, Div, Yield, and % Chg.

FOOD, GROCERIES, ETC

Table of Food, Groceries, etc share list with columns for Name, Price, Last, Div, Yield, and % Chg.

HOTELS AND CATERERS

Table of Hotels and Caterers share list with columns for Name, Price, Last, Div, Yield, and % Chg.

ENGINEERING

Table of Engineering share list with columns for Name, Price, Last, Div, Yield, and % Chg.

INDUSTRIALS

Table of Industrial share list with columns for Name, Price, Last, Div, Yield, and % Chg.

ENGINEERING

Table of Engineering share list with columns for Name, Price, Last, Div, Yield, and % Chg.

ENGINEERING - Continued

INDUSTRIALS - Continued

Continuation of Engineering and Industrial share lists with columns for Name, Price, Last, Div, Yield, and % Chg.

INDUSTRIALS

Table of Industrial share list with columns for Name, Price, Last, Div, Yield, and % Chg.

INDUSTRIALS

Table of Industrial share list with columns for Name, Price, Last, Div, Yield, and % Chg.

INDUSTRIALS

Table of Industrial share list with columns for Name, Price, Last, Div, Yield, and % Chg.

INDUSTRIALS

Table of Industrial share list with columns for Name, Price, Last, Div, Yield, and % Chg.

INDUSTRIALS

Table of Industrial share list with columns for Name, Price, Last, Div, Yield, and % Chg.

INDUSTRIALS

Table of Industrial share list with columns for Name, Price, Last, Div, Yield, and % Chg.

INDUSTRIALS

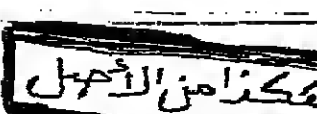
Table of Industrial share list with columns for Name, Price, Last, Div, Yield, and % Chg.

INDUSTRIALS

Table of Industrial share list with columns for Name, Price, Last, Div, Yield, and % Chg.

INDUSTRIALS

Table of Industrial share list with columns for Name, Price, Last, Div, Yield, and % Chg.





INDUSTRIALS - Continued

Table of industrial stocks including companies like British Petroleum, Shell, and ICI, with columns for stock price, last price, and change.

LEISURE - Continued

Table of leisure stocks including British Airways, British Telecom, and British Gas.

MOTORS, AIRCRAFT TRADES

Table of motor and aircraft trade stocks including Rover, Leyland, and British Leyland.

Commercial Vehicles

Table of commercial vehicle stocks including Leyland and Leyland DAF.

Components

Table of component stocks including Lucas and Lucas Industries.

Garages and Distributors

Table of garage and distributor stocks including Halfords and Halfords Stores.

NEWSPAPERS, PUBLISHERS

Table of newspaper and publisher stocks including News International and Newsprint.

PAPER, PRINTING, ADVERTISING

Table of paper, printing, and advertising stocks including Newsprint and Newsprint.

PROPERTY - Continued

Table of property stocks including British Land, British Property, and British Home Stores.

SHIPPING

Table of shipping stocks including British Shipbuilders and British Shipbuilders.

SHOES AND LEATHER

Table of shoes and leather stocks including Clarks and Clarks.

SOUTH AFRICANS

Table of South African stocks including Anglo American and Anglo American.

TEXTILES

Table of textile stocks including British Textiles and British Textiles.

TOBACCO

Table of tobacco stocks including British American Tobacco and British American Tobacco.

TRUSTS, FINANCE, LAND

Table of trusts, finance, and land stocks including British Trustee and British Trustee.

INVESTMENT TRUSTS - Cont.

Table of investment trusts including British Investment and British Investment.

FINANCE, LAND - Cont.

Table of finance and land stocks including British Finance and British Finance.

OIL AND GAS

Table of oil and gas stocks including British Petroleum and British Petroleum.

OVERSEAS TRADERS

Table of overseas trader stocks including British Overseas and British Overseas.

PLANTATIONS

Table of plantation stocks including British Plantations and British Plantations.

TESS

Table of TESS stocks including British TESS and British TESS.

MINES - Continued

Table of mines stocks including British Mines and British Mines.

MINES - Continued

Table of mines stocks including British Mines and British Mines.

Diamond and Platinum

Table of diamond and platinum stocks including British Diamonds and British Diamonds.

Central Africa

Table of central Africa stocks including British Central Africa and British Central Africa.

FINANCE

Table of finance stocks including British Finance and British Finance.

Australians

Table of Australian stocks including British Australians and British Australians.

Notes

Notes section providing additional information and commentary on the market.

Miscellaneous

Table of miscellaneous stocks including British Miscellaneous and British Miscellaneous.

PLANTATIONS

Table of plantation stocks including British Plantations and British Plantations.

TESS

Table of TESS stocks including British TESS and British TESS.

INSURANCE

Table of insurance stocks including British Insurance and British Insurance.

PROPERTY

Table of property stocks including British Property and British Property.

TRUSTS, FINANCE, LAND

Table of trusts, finance, and land stocks including British Trusts and British Trusts.

FINANCE, LAND - Cont.

Table of finance and land stocks including British Finance and British Finance.

MINES - Continued

Table of mines stocks including British Mines and British Mines.

LEISURE

Table of leisure stocks including British Leisure and British Leisure.

PROPERTY

Table of property stocks including British Property and British Property.

TRUSTS, FINANCE, LAND

Table of trusts, finance, and land stocks including British Trusts and British Trusts.

FINANCE, LAND - Cont.

Table of finance and land stocks including British Finance and British Finance.

MINES - Continued

Table of mines stocks including British Mines and British Mines.







NYSE COMPOSITE CLOSING PRICES

AMEX COMPOSITE CLOSING PRICES

Closing prices January 3

Main table of NYSE Composite Closing Prices, listing various stocks with columns for stock name, price, and change.

Table of AMEX Composite Closing Prices, listing various stocks with columns for stock name, price, and change.

OVER-THE-COUNTER Nasdaq national market, closing prices, January 3

Main table of Over-the-Counter (Nasdaq) closing prices, listing various stocks with columns for stock name, price, and change.

Continued on Page 20



CURRENCIES, MONEY and CAPITAL MARKETS

FOREIGN EXCHANGES

Carousel runs out of steam

BY COLIN MILLHAM

It would be difficult to find more contrast between the performance of a currency than the dollar at the beginning of this year and at the start of 1985. Last January it was surging to new record highs; this month it is at its lowest level for more than 24 years.

At the beginning of last year the US economy seemed to be growing at an exceptional rate. Coupled with high interest rates to fund the large budget deficit, it was drawing funds away from countries such as Japan and Germany.

It has been like a carousel, driven round until it runs out of steam and suddenly threatens to lose its attraction. There comes a point where the money earned in goods by Japan and European countries cannot find a natural home in the US.

£ IN NEW YORK

Table showing exchange rates for £ in New York, including spot and forward rates for various periods.

Forward premiums and discounts apply to the U.S. dollar.

cent, and financial markets are suspicious that the rate for 1986 is over optimistic. Growth in the last quarter of 1985 was supported by stockbuilding and government spending, rather than consumer demand.

This appears to set a floor of ¥200 for the dollar, but unless it is sufficient to redress the trade balance in favour of Japan, it will not placate the protectionist forces building up in the US.

CURRENCY FUTURES

Table of currency futures prices for various currencies like Sterling, Deutsche Marks, and Swiss Francs.

Table of currency futures prices for the London SE £/S options market.

Table of currency futures prices for the Philadelphia SE \$/S options market.

Table of currency futures prices for the Chicago US Treasury Bonds market.

CURRENCY MOVEMENTS

Table showing currency movements for various currencies like US dollar, Canadian dollar, etc.

OTHER CURRENCIES

Table showing exchange rates for other currencies like Australian dollar, Hong Kong dollar, etc.

CURRENCY RATES

Table showing currency rates for various countries like UK, France, Germany, etc.

POUND SPOT - FORWARD AGAINST POUND

Table showing pound spot and forward rates against the pound for various currencies.

DOLLAR SPOT - FORWARD AGAINST DOLLAR

Table showing dollar spot and forward rates against the dollar for various currencies.

FORWARD RATES AGAINST STERLING

Table showing forward rates against sterling for various currencies.

EMS EUROPEAN CURRENCY UNIT RATES

Table showing EMS European Currency Unit rates for various countries.

MONEY MARKETS

No sign of change in London

Interest rates showed no sign of change in London last week, as the pound held fairly steady on the foreign exchange. Trading remained quiet because of the Christmas and New Year holidays, while the pound failed to gain ground against a depressed dollar, and the US currency continued to suffer from weak US economic statistics.

Three-month sterling interbank was around 11 1/2 per cent, underpinning the present 11 1/2 per cent of clearing bank base rates, and suppressing any hopes of an early cut in London rates.

In New York and Frankfurt the money markets suffered from strains because of the Fed's discount rate, in spite of further depressing economic statistics.

NEW YORK

In Frankfurt money market rates touched a peak of 6 per cent on end-of-year pressure, as banks were prepared to bid for funds to square their books.

The Bundesbank injected some DM 3bn before the New Year holiday in overnight money, and on Friday set a new two-tranche tender for 28 and 56-day securities repurchase agreements at a minimum rate of 4.50 per cent.

Table of New York money market rates for various currencies.

Table of London interbank fixing rates for various currencies.

Table of London money rates for various currencies.

Table of weekly change in world interest rates for various currencies.

Table of money rates for various currencies.

Table of money rates for various currencies.

Table of currency futures prices for various currencies.

Table of currency futures prices for the London SE £/S options market.

Table of currency futures prices for the Philadelphia SE \$/S options market.

Table of currency futures prices for the Chicago US Treasury Bonds market.

EXCHANGE CROSS RATES

Table showing exchange cross rates for various currencies.

Table showing exchange cross rates for various currencies.

Table showing exchange cross rates for various currencies.

Table showing exchange cross rates for various currencies.

Table showing exchange cross rates for various currencies.

Table showing exchange cross rates for various currencies.

Table showing exchange cross rates for various currencies.

Table showing exchange cross rates for various currencies.

Table showing exchange cross rates for various currencies.

Table showing exchange cross rates for various currencies.

Table showing exchange cross rates for various currencies.

Table showing exchange cross rates for various currencies.

The Princess Alice Hospice advertisement with logo and contact information.

THE KYOWA BANK, LIMITED advertisement for U.S. \$15,000,000 Floating Rate Certificates of Deposit.

Standard Chartered PLC advertisement for US\$400,000,000 Undated Primary Capital Floating Rate Notes.

Standard Chartered Merchant Bank Limited advertisement for US\$408.51 per US\$1,000 Note.

U.S. \$150,000,000 Export Development Corporation advertisement for 8 1/2% Notes Due January 1, 1991.

LAURA EN VEREENIGING advertisement for SOCIÉTÉ GÉNÉRALE DE BELGIQUE, acquired a minority interest in "AMSTERDAM RUBBER".

Handwritten signature or stamp at the bottom of the page.



# FINANCIAL TIMES SURVEY

Today's computing and communications technologies are rapidly converging to open up a vast array of fresh opportunities for users and suppliers of telecommunications systems. The economic impact of this technological revolution is only just starting to emerge.

## Era of massive upheavals

By GUY DE JONQUIERES

**C**REATIVE DESTRUCTION was the term coined by Joseph Schumpeter, the Austrian economist, to describe the process of industrial change unleashed by technological innovation. It applies with particular force to the state of the world telecommunications industry today.

After a century of stable and predictable development, telecommunications is being shaken by massive upheavals which are simultaneously shaking established institutional and industrial structures to their foundations and opening up a kaleidoscopic array of new opportunities.

At the heart of this process lies the convergence—perhaps collision would be a better word—of computing and communications technologies. For all practical purposes, the most advanced communications networks today are vast interconnected computer systems controlled by sophisticated software and carrying streams of digitised information.

The practical implications of this technological change go well beyond the computing and communications industries. Efficient management of information is already a vital competitive tool in an increasingly wide range of industries. On Wall Street, for example, the telecommunications budgets of many major financial services firms are their second largest item of annual spending after staff costs.

In manufacturing, General Motors, the world's largest car company, believes technologically advanced communications

is so important that it has paid \$2.5bn to acquire Electronic Data Systems, which is re-equipping GM's internal data network at a cost of several hundred million dollars more. The programme, when completed, is expected to give GM the largest and most modern communications system in the world after AT&T.

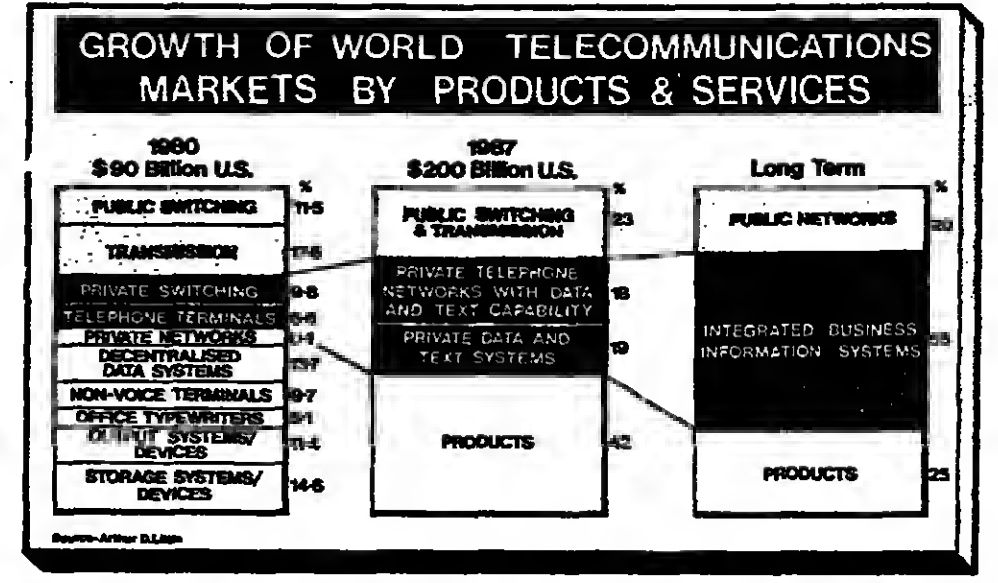
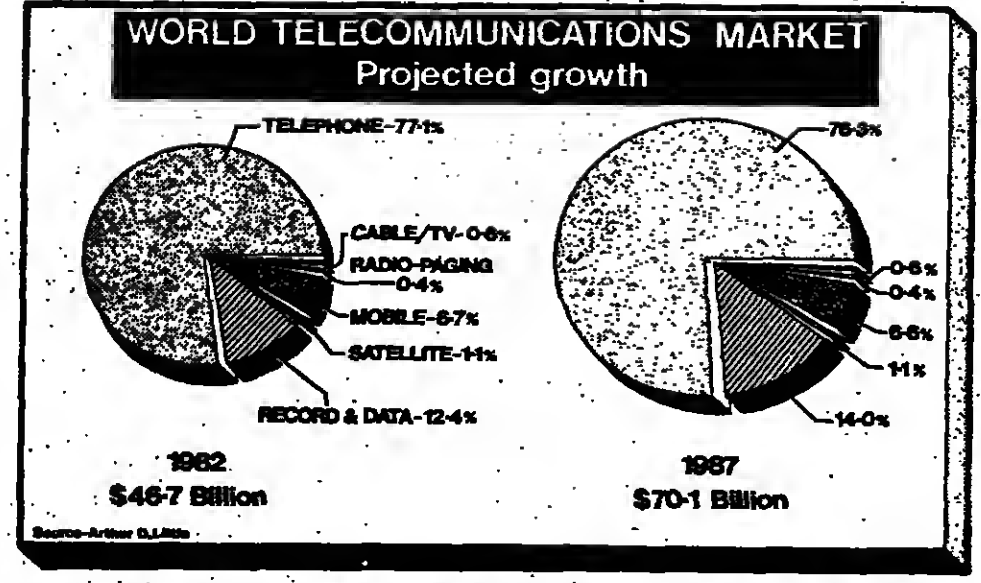
The power of modern communications is also fast demolishing the frontiers between hitherto separate industries, lowering the barriers to entry by new competitors. The emergence of multi-capacity financial conglomerates ahead of the planned deregulation of the City of London is made possible by the fact that so many types of financial transactions can now be conducted on the same electronic information highways.

This trend is, for example, also leading Reuters, the electronic business information company, to develop as a provider of financial trading networks. The potential versatility of such services both points to the emergence of truly global 24-hour trading systems and raises awkward questions about the regulatory roles and functions of Stock Exchanges as traditionally defined.

At the same time, telephone companies such as the Bell regional groups in the US and British Telecom are fast expanding beyond their previous markets to offer a growing variety of "value added" services which combine communications and computer processing to serve business needs.

The impact of the technological revolution in telecommunications is, in a very real sense,

# Communications THE WORLD BUSINESS MARKET



turning it into everybody's business. The full extent of the economic and policy consequences of this transformation is only now starting to emerge.

### Challenge to monopolies

It is becoming increasingly clear that the monopoly systems which have traditionally governed telecommunications almost everywhere are under challenge. As the borderline between communications and computers disappears and a vast array of new services proliferates, the necessity—indeed, the possibility—of maintaining "neutral" monopolies grows increasingly questionable.

The US, Britain and Japan have all decided that the old order was simply becoming too onerous and was constricting, instead of stimulating, innovation and growth. In the past five years, all three countries have, to differing degrees,

thrown their national markets open to competition. Elsewhere, and particularly in Continental Europe, the monopoly principle remains more solidly entrenched—but is coming under mounting pressure. Several European countries, including France, West Germany and the Netherlands, are currently debating policy changes.

### New alliances forming

This task has proven no less difficult in those countries which believed that the introduction of competition would make official regulation largely obsolete. The complexity of the government regulatory system in the US, and the amount of activity which it generates, has certainly grown no smaller since the decision was taken to deregulate the telecommunications market.

The central problem facing regulators such as the US Federal Communications Com-

mission (FCC) is that in order to make competition work, they are repeatedly forced to intervene to change the rules. In spite of the break-up of AT & T, the company and its former regional subsidiaries remain dominant in their traditional markets.

### IN THIS SURVEY

- The US industry changes shape 2
- The US equipment market 2
- Impact of change on US business users 4
- US long-distance telephone service battle 4
- Regional telephone companies in the US 4
- Office automation 4
- Pressures mount on European equipment-makers 5
- Britain sets the pace in policy reforms 5
- New developments in telecommunications industries in the UK, France, West Germany, Italy, Spain, Netherlands, the Nordic nations and Ireland 5-7
- Japan: the impact of deregulation 6
- The Japanese telecommunications industry 6
- The growth of mobile communications 8
- Value-added networks 8

mission (FCC) is that in order to make competition work, they are repeatedly forced to intervene to change the rules. In spite of the break-up of AT & T, the company and its former regional subsidiaries remain dominant in their traditional markets.

The challenge for policy is to keep these markets open enough to allow smaller competitors to flourish, while avoiding the imposition on the dominant players of constraints so severe that their capacity to compete is not unfairly impeded. This is not proving an easy balance to strike, as is clear from the successive shifts and reverses in FCC policy in the past few years.

In parallel, telecommunications supplier industries are also struggling to adapt to radical change. Loss of captive markets due to deregulation, the mounting costs of developing new products and the accelerating cycle of innovation are intensifying competition to seek out new markets worldwide.

Companies from other industries, such as IBM, the world's largest computer manufacturer, are entering the market. Long-standing customers, such as AT&T's former regional companies and BT, are developing as competitors, and a wide range of corporate alliances is being formed.

The opening up of the US equipment market, due to the break-up of AT&T, has created almost overnight a wealth of new commercial opportunities for both American and foreign suppliers. But competition is growing intense and whittling away the profit margins on many products.

Europe is more vulnerable to these upheavals than either the US or Japan. Its leading telecommunications manufacturers are finding it increasingly difficult to survive on the basis of home markets which fail to provide the economies of production.

Continued on page 8

## Plessey ISDX—connecting the future

It's here — the Plessey ISDX exchange. It's ready for you to take the great leap forward into truly integrated communication of voice, text and data. It's waiting to link the business world to ISDX — the newly emerging private and public integrated services digital networks.

It's able to provide simultaneous connection for data terminals or workstations and telephones over a single telephone line.

What's more, via the new Plessey ISDI — the interactive digital access desk phone — it can even let the busy executive handle two telephone calls plus data communications simultaneously.

The Plessey ISDX exchange evolved from the ISDX system — Britain's outstandingly successful range of business exchanges.

If you're contemplating better communications, make certain you know all the advantages, now of connecting the future.

Contact Plessey Communication Systems Limited, Beeston, Nottingham NG9 1HA. Telex: 572201. Telephone: Linkline 0530/622111. Free call.

**PLESSEY**



Communications 2

As the US telecommunications battle intensifies, AT & T and IBM are forging links with other American and foreign partners, as PAUL TAYLOR reports from New York.

US giants form fresh alliances

SIX MONTHS ago International Business Machines (IBM) the world's largest computer-maker, stunned Wall Street by announcing that it planned to fold its loss-making Satellite Business Systems (SBS) into MCI Communications, American Telephone and Telegraph's (AT & T) chief rival in the US long-distance telephone market.

In the process IBM said it would take an initial 18 per cent equity stake in MCI and might raise this to a maximum of 30 per cent through the investment of up to an additional \$400m. IBM's acquisition of a minority stake in MCI, which has \$2.5bn in annual revenues, an expanding 3.2m customer base and growing 9 per cent market share, came hard on the heels of the computer giant's \$1.26bn acquisition of Rolm, a leading West Coast PBX manufacturer in 1984.

Predictions

Few additional details have emerged on the IBM/MCI link since it was first announced in June—or on how MCI and IBM plan to accommodate their strikingly different corporate cultures. Most analysts agree that IBM's deep pockets, management skills and marketing might help feisty MCI—which made its reputation snapping at the heels of AT & T—in the continuing long-distance telephone battle, further intensifying competition.

But some industry experts also argue that the deal represents something of an admission of defeat by "Big Blue" SBS, originally a joint venture between IBM, Aetna and Comsat, aimed at providing business customers with advanced data and voice communications services, missed the market and was forced to switch to the more mundane and fiercely competitive business of offering out-lease telephone service to individuals.

Even then, despite pumping more than \$1.3bn into the project, SBS managed to garner less than 1 per cent of the long-distance telephone market, lost an estimated \$14m on revenues of \$29m in 1984 and was not elected to the market even until 1987 at the earliest.

Thus, some industry experts such as Prof Eli Noam of Columbia University see the

MCI deal as a "defensive move" by IBM and an admission that it may not yet have the expertise to run a telecommunications business.

In my opinion it represents a partial withdrawal by IBM from the long-distance field," says Prof Noam.

Nevertheless, the move, symbolic of the dramatic upheaval underway in the US telecommunications industry, was immediately seized upon by AT & T as evidence that the era of full-blooded competition had finally arrived and that AT & T's telecommunications business should be fully deregulated.

Mr Charles Brown, AT & T's chairman and chief executive, told shareholders, "some say our competitors in the long-distance business are not yet strong enough to go it on their own. Looking at the size and resources of such competitors as GTE, ITT and dozens of others makes that viewpoint hardly credible. The announcement of IBM's acquisition of MCI and MCI—two formidable competitors of AT & T—should put that myth to rest once and for all."

Whether it will be another question, one perhaps best left to the regulators in Washington, is the effect on the IBM/MCI deal of the US Federal Communications Commission (FCC) which has taken a number of key decisions in AT & T's favour—often despite the fierce protests of other common carriers who have been arguing for FCC restraint in the deregulation process.

Among these the FCC voted in September to remove one of the most serious restrictions over AT & T, the so-called computer inquiry 2 requirement that AT & T separate its unregulated equipment business from its regulated long distance telephone service. That decision, which AT & T says could save it a year's means AT & T have both turned to domestic and increasingly, to foreign partners. In Japan and Europe, both companies are forging links with local telecommunications and computer groups. For example AT & T has teamed up with Matsushita in Japan to offer communications services. The huge capital spending plan, which includes expanding America's fibre optic cable network by 56

per cent to more than 120,000 miles and doubling the number of digital switching systems to 255, is part of a \$6.7bn capital investment plan undertaken by the company between 1984 and 1988.

As a result, Ameritech says that by the autumn this year 75 per cent of its 14.5m customer lines will be equipped to deal with direct access—up from 55 per cent today. The pace of technological change is also accelerating. Ameritech's Illinois Bell unit will conduct the nation's first trial of an integrated services digital network (ISDN), which allows simultaneous voice and data transmission over ordinary telephone lines, this year.

At the same time new competition is changing the shape of the market. Long-distance service. MCI, GTE Sprint and other long-distance carriers have dramatically expanded their international services over the past 18 months—challenging AT & T's dominance of the market and forcing the telecommunications giant to begin cutting its own rates. Last month, for example, AT & T proposed reducing call prices to 23 countries by an average of 10.1 per cent in a move that it said would save its customers \$150m a year.

Some of the highest post Bell break-up changes are taking place in the US telecommunications equipment market—worth an estimated \$60bn a year or about 40 per cent of the world total where the divestiture agreement freed the Bell operating companies for the first time to make their own equipment purchasing decisions.

This, coupled with mandated changes in local telephone access arrangements and the increasingly real threat that major business clients will build their own systems to bypass local telephone services altogether has spurred a wave of capital spending by both the long-distance carriers and the 22 Bell operating companies.

For example, Ameritech, the Chicago-based regional holding company, said last month that it plans to spend nearly \$2bn this year to expand and upgrade its Midwest telecommunications services. The huge capital spending plan, which includes expanding America's fibre optic cable network by 56

per cent to more than 120,000 miles and doubling the number of digital switching systems to 255, is part of a \$6.7bn capital investment plan undertaken by the company between 1984 and 1988.

As a result, Ameritech says that by the autumn this year 75 per cent of its 14.5m customer lines will be equipped to deal with direct access—up from 55 per cent today. The pace of technological change is also accelerating. Ameritech's Illinois Bell unit will conduct the nation's first trial of an integrated services digital network (ISDN), which allows simultaneous voice and data transmission over ordinary telephone lines, this year.

state-owned telephone equipment company, while AT & T has bought an equity stake in Olivetti which manufactures some of its personal computer systems.

But this trend towards international partnerships and competition—is not confined to AT & T and IBM alone. Almost all the regional Bell holding companies are attempting to sell their telecommunications expertise overseas—part of a wave of diversification and acquisitions by the seven regional holding companies which itself threatens to challenge some of the basic tenets of the Bell system break-up.

At the same time new competition is changing the shape of the market. Long-distance service. MCI, GTE Sprint and other long-distance carriers have dramatically expanded their international services over the past 18 months—challenging AT & T's dominance of the market and forcing the telecommunications giant to begin cutting its own rates. Last month, for example, AT & T proposed reducing call prices to 23 countries by an average of 10.1 per cent in a move that it said would save its customers \$150m a year.

Some of the highest post Bell break-up changes are taking place in the US telecommunications equipment market—worth an estimated \$60bn a year or about 40 per cent of the world total where the divestiture agreement freed the Bell operating companies for the first time to make their own equipment purchasing decisions.

This, coupled with mandated changes in local telephone access arrangements and the increasingly real threat that major business clients will build their own systems to bypass local telephone services altogether has spurred a wave of capital spending by both the long-distance carriers and the 22 Bell operating companies.

For example, Ameritech, the Chicago-based regional holding company, said last month that it plans to spend nearly \$2bn this year to expand and upgrade its Midwest telecommunications services. The huge capital spending plan, which includes expanding America's fibre optic cable network by 56

per cent to more than 120,000 miles and doubling the number of digital switching systems to 255, is part of a \$6.7bn capital investment plan undertaken by the company between 1984 and 1988.

As a result, Ameritech says that by the autumn this year 75 per cent of its 14.5m customer lines will be equipped to deal with direct access—up from 55 per cent today. The pace of technological change is also accelerating. Ameritech's Illinois Bell unit will conduct the nation's first trial of an integrated services digital network (ISDN), which allows simultaneous voice and data transmission over ordinary telephone lines, this year.

At the same time new competition is changing the shape of the market. Long-distance service. MCI, GTE Sprint and other long-distance carriers have dramatically expanded their international services over the past 18 months—challenging AT & T's dominance of the market and forcing the telecommunications giant to begin cutting its own rates. Last month, for example, AT & T proposed reducing call prices to 23 countries by an average of 10.1 per cent in a move that it said would save its customers \$150m a year.

Some of the highest post Bell break-up changes are taking place in the US telecommunications equipment market—worth an estimated \$60bn a year or about 40 per cent of the world total where the divestiture agreement freed the Bell operating companies for the first time to make their own equipment purchasing decisions.

This, coupled with mandated changes in local telephone access arrangements and the increasingly real threat that major business clients will build their own systems to bypass local telephone services altogether has spurred a wave of capital spending by both the long-distance carriers and the 22 Bell operating companies.

For example, Ameritech, the Chicago-based regional holding company, said last month that it plans to spend nearly \$2bn this year to expand and upgrade its Midwest telecommunications services. The huge capital spending plan, which includes expanding America's fibre optic cable network by 56

THE FERMENT of divestiture continues to dominate the US telecommunications industry. While the break-up of AT&T created new opportunities for many equipment suppliers, competition to take advantage of new markets has been severe.

Further regulatory changes that may allow AT&T to combine its marketing efforts for end-user communications and computer equipment along with normal long-distance services are expected to create more uncertainty among competitors and customers.

The major equipment trends in telecommunications include the rapid spread of digital technology, use of fibre optics transmission, the growth of special data transmission services and private networks.

In the long-distance digital communications business, the equipment market has been directly impacted by regulatory uncertainty. Long-distance carriers' demand for equipment has been sporadic recently because of financial difficulties at many of the resellers and decreases in spending by Sprint and MCI. However, some equipment sectors, such as fibre optics, are growing.

The divestiture of local telephone companies from AT&T created a bonanza for suppliers of network modernisation equipment such as digital switching and various transmission products. These markets are now becoming increasingly competitive, however, and growth is expected to slow significantly next year.

New markets are, however, emerging. Large US companies are beginning to turn to private satellite networks as a low cost

alternative to the public telephone network. According to a recent study by analysts at F. Rothschild, Usterberg, Towbin in San Francisco, the market for these so-called "very small aperture terminal" networks is currently worth only about \$15m, but will approach \$1bn by the end of this decade.

In the customer premise equipment sector, competition has been rife over the past year. Pricing of private branch exchanges (PBXs) has been particularly aggressive with market growth slowing down and over 25 companies competing for a share of the business. In addition, AT&T has been actively trying to regain market share and "giving away" equipment, competitors claim.

A new generation of PBXs which incorporate both voice and data communications is emerging. Along with voice/data terminals these systems signal the convergence of telecommunications and office automation equipment with desk-top devices that combine the roles of the personal computer and telephone connected to voice/data networks.

"Voice processing" the use of computers to digitise, store and deliver the spoken word, has become a rich new sector

of the communications equipment market over the past few years.

According to market researchers, US sales of voice messaging systems will grow from approximately \$150m this year to as much as \$1bn by 1990.

In the data communications sector, which has historically grown at rates in excess of 30 per cent per year, equipment sales trends have been mixed, depending upon the changing fortunes of different segments of the computer industry.

The personal computer boom may be running out of speed in the US, but for communications equipment suppliers it has only just begun. Local area networks represent one of the most promising categories of communications equipment in the year ahead, according to market analysts.

To date, only about four per cent of the millions of personal computers used in office and factory applications are linked to networks. Demand has, however, been brewing and the recent announcement by IBM of its offering local area network will shake the market to the hilt, suppliers hope.

The IBM local area network establishes a standard which is expected to be adopted by numerous computer and office equipment manufacturers. The use of one standard system facilitates interconnection between different brands and types of equipment.

Datquest, the San Jose, California, market research company, lists local area networks as one of the fastest-growing segments of the communications equipment market during the next few years.

Accordingly, the LAN market totalled just \$140m in 1983, but will grow at an average 27 per cent per year to total \$2.5bn by 1989.

Sales of modems, which are used to connect computers to telephone lines, are also increasing as more personal computer users need to connect their machines to databases, mainframe computers and each other. In the microcomputer area, the US market totals about \$600m and will grow to \$1.5bn by 1990, says Michael Murphy of Venture Capital Management in San Francisco.

of the communications equipment market over the past few years.

According to market researchers, US sales of voice messaging systems will grow from approximately \$150m this year to as much as \$1bn by 1990.

In the data communications sector, which has historically grown at rates in excess of 30 per cent per year, equipment sales trends have been mixed, depending upon the changing fortunes of different segments of the computer industry.

The personal computer boom may be running out of speed in the US, but for communications equipment suppliers it has only just begun. Local area networks represent one of the most promising categories of communications equipment in the year ahead, according to market analysts.

To date, only about four per cent of the millions of personal computers used in office and factory applications are linked to networks. Demand has, however, been brewing and the recent announcement by IBM of its offering local area network will shake the market to the hilt, suppliers hope.

The IBM local area network establishes a standard which is expected to be adopted by numerous computer and office equipment manufacturers. The use of one standard system facilitates interconnection between different brands and types of equipment.

Datquest, the San Jose, California, market research company, lists local area networks as one of the fastest-growing segments of the communications equipment market during the next few years.

Accordingly, the LAN market totalled just \$140m in 1983, but will grow at an average 27 per cent per year to total \$2.5bn by 1989.

Sales of modems, which are used to connect computers to telephone lines, are also increasing as more personal computer users need to connect their machines to databases, mainframe computers and each other. In the microcomputer area, the US market totals about \$600m and will grow to \$1.5bn by 1990, says Michael Murphy of Venture Capital Management in San Francisco.

The US equipment market

Amounts in \$m	1985	1989	Compound annual growth rate %
Customer premises equipment	11.7	22.0	12.5
Terminal equipment	2.8	4.1	9.5
Data communications equipment	1.3	4.6	19.2
Local area networks	2.0	2.5	28.3
Business communications systems	1.0	7.5	4.2
Data PBXs	0.15	0.23	11.8
Automatic call distributors	0.4	1.1	33.7
Attached network functions	0.7	1.9	25.8
Switching equipment	2.1	3.3	1.2
Central office switching equipment	2.4	2.0	-4.7
Private branch exchanges	2.4	4.5	7.7
Transmission equipment	3.3	5.3	11.9

Source: Datquest, San Jose, California.

Business network planning: new products and services make international business communications more economical and efficient, as Dennis Conroy and John Collings report.

Choice for users grows ever-wider

AS MANY countries have liberalised the supply of telecom equipment and services, companies have faced an unfamiliar and often bewildering range of choice. The situation is particularly complex for those running international networks because of the different rates of liberalisation in different countries.

Even for the smaller company, new products and services are, however, offering opportunities not only for doing international business more cheaply or efficiently, but even for doing new kinds of business and extending market-reach.

Some examples of new applications are provided by facsimile transmission (fax) and access to the telex network from the Prestel (videotex) service in the UK.

To some extent fax has to be viewed in terms of its cost-effectiveness as a substitute for telex, post, telephone calls and courier services. However, exploiting the potential of fax has given some companies an important competitive edge—for example, an English law firm uses fax to get court orders to their US operation for action within hours of issue by UK courts.

Advantages

In the case of Prestel access to telex, the opportunity now exists for small businesses to send and receive telex by purchasing a low cost TV adapter. This has enabled a small specialist advisory company, operating internationally, to use telex on a regular basis. This has particular advantages in dealing with countries in time zones that make communication by telephone difficult.

While coping with this widening choice of equipment and services represents a real challenge to the small business user of international telecommunications, it also represents real opportunity to exploit available options to minimise cost. At its simplest this may just mean ensuring that most traffic between two countries originates at the end which has lower international call rates. For example, when calling high cost centres in Europe, users can enjoy significant savings by expediently calling into a country like the UK, which has relatively lower calling rates, and asking the respondent to call back.

Relatively small users of international telecommunications can achieve savings by renting a dedicated line—any company calling between UK and US designations for around 14 hours per day should look carefully at this option.

Companies that increasingly employ sophisticated applications of telecommunications on a global scale as a key competitive tool face a problem of flexibility in determining the structure and "mix" of their networks.

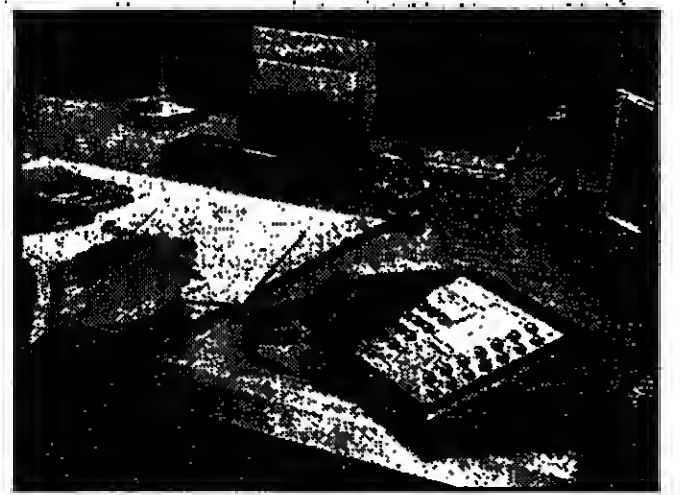
First, network structure will be driven by the logic of the geographic locations and volumes of the company's activities. The second is to be motivated to take account of variations in the speed and quality of services available in different countries, the levels and structure of charges, restrictions on use of private networks and their link to public switched networks and the availability of supporting equipment and services.

These considerations have led one leading firm of money brokers to switch traffic between its two Far East offices in London, using circuits leased from British Telecom.

Large multinationals are increasingly flexible and mobile with regard to the location of telecommunications-intensive functions. They will locate them where the economics and service availability has the most attractive—new and longer-term.

A leading international airline recently moved its main European reservation communications centre from one European capital to another. This willingness and ability to move and reconfigure headquarters is the competition among telephone companies for serving multinational companies.

Thus, the pressure is on even those telephone companies with the most entrenched domestic monopolies. One US multinational high technology manufacturing company, which uses telecommunications to co-ordinate and control its operations



The new SDX digital key telephone system from Stantel, the same under which STC Telecommunications operates in the US market. The SDX "family" is a port-orientated system ranging from 20 to 60 ports.

worldwide, has threatened to pull out of a facility in a European development area unless the quality and availability of advanced telecommunications services improve.

Manufacturers Hanover Trust (MHT), the New York-based commercial banking giant, now has one of the most sophisticated, widespread telecommunications networks in the world. MHT invested more than \$55m during the past 10 years to develop an integrated, private packet switching network (called Geonet) connecting all of its bank branches and more than 6,000 large customers of its correspondent banking services in 45 cities and 66 countries.

While MHT relies on a number of telephone companies, the bank designed Geonet, controls it, and keeps it running 24 hours a day.

Flexibility

MHT certainly has the scale, clout and, probably the technical flexibility to deploy network hubs and circuits based not only on physical concentrations of business activity but equally (in some cases) on telecommunications service availability, responsiveness and rates.

Private networks such as GEONET are taking on increasing strategic significance to their owners. As such, they are unlikely to decline in number. Nonetheless, they truly are hybrids of private equipment and intelligence, and public (telephone company) facilities and circuits.

The challenge for telephone companies is to retain a balanced and beneficial mix of the two. After all, users do not want to be telephone companies, but they will seek out or create viable alternatives to what they view as unsatisfactory service options.

For example, in the US today, close to 20 "teleports" are operative or hearing completion. The largest and arguably the most threatening to a telephone

company is New York's Teleport. Supported financially mainly by Merrill Lynch, the teleport offers New York-based companies high-speed, fixed-rate communication linkages over fibre optic cable to satellite-based domestic and international long-distance telecommunications services.

Teleport offers users local access to a dozen or more options for long distance voice, data and video transmission services.

Many multinational users complain about the extent to which they, rather than the telephone companies, must project worldwide the design and installation of international networks.

These companies negotiate country-by-country procure needed services timely and costly process that complicates network planning and encourages users to do more for themselves.

Similarly, the extent to which variations in the telecommunications environments in different countries leads to networks that depart from physical topological logic provides a cost motivation for users to do as much for themselves as possible.

Moreover, these large worldwide users feel compelled to assume as much control as they can when telephone companies appear unresponsive to user needs for worldwide integration and flexibility to adapt to business shifts, security, and round-the-clock network availability.

Users who are not satisfied thus need to work more actively and closely together to develop standards and working relationships to aid users in knitting together and controlling global networks. More help from the telephone companies might convince users to do less for themselves and that means more involvement and revenue for the telephone companies.

Dennis J. Conroy is a partner with Coopers & Lybrand, New York; John R. Collings is associate director of Coopers & Lybrand Associates, London.

Cost remains critical factor

LESS THAN 20 years ago, users of telecommunications equipment and systems, particularly those in the business sector, were looking desperately for technology both to improve existing services and to provide new facilities.

Today, as a result of major technological advances and the gradual erosion of traditional monopolies, the telecommunications situation has almost totally reversed. Merging microprocessor-based telecommunications and computing technology, in a myriad of forms, is searching for markets. Flooded with lowered drought leaving many users confused and bewildered, governments unsure how far they should go in releasing their regulatory hold, and equipment manufacturers grappling with the problems of intense competition and an urgent need to fundamentally change their traditional marketing efforts.

The catalyst is this dramatic technology change is the silicon chip. It is now possible to put nearly 1m electronic components on a one-centimetre chip of silicon and, although it is getting increasingly more difficult, researchers see no reason why this density should not continue to double every 18 months for the next ten to 20 years.

High speed circuits form the basis of equipment which enables telecommunications and the newer information technology systems to handle digital language of the computer.

Digital technology allows all forms of information—voice, data, moving pictures and so on—to be converted into a common binary code and sent in a bit stream from one subscriber to another over the existing telephone or other specialist networks.

The world's telecommunications administrations are investing heavily in converting their traditional analogue networks to handle digital communication. All these administrations are all moving towards the ultimate goal of a fully integrated services digital network (ISDN) which will carry all modes of communication quickly and efficiently with the same full world-wide subscriber-to-subscriber access that we now enjoy with the telephone.

Everyone agrees that the days of the plain old telephone are numbered, but there are many different opinions about what is actually going to replace it and, equally important, when.

The speed of market acceptance of new technology always appears slower than initial predictions. In the early 1970s, for example, there were confident forecasts of a massive growth in digital communications requiring the introduction of large public data networks.

Today, while some dedicated networks have been introduced, even their most enthusiastic

supporters would have to admit that they are still very small and not growing at the rates originally predicted.

Similarly, although it is now beginning to make some progress in the business market area, for example, the UK's innovative Prestel Videotex system failed to arouse mass market interest as was predicted by its promoters. There are so far 62,000 terminals attached to the Prestel network.

The key to future market acceptance of new services will be cost. Users seem prepared to try almost anything provided it can be cost-justified.

This may involve the manufacturer or service supplier actually giving the hardware associated with a new service free to subscribers, relying on the use of that service to quickly recoup the cost.

the use of higher data rates. Full duplex operation up to 9.6 kbits/s is now possible over the switched telephone network with dedicated circuit switched data networks for high transmission speeds.

A packet switched data service, in which customers launch addressed blocks of data into the network to be individually routed to their destinations, has also been in operation in the UK since 1981. Network interworking options are available giving interworking, for example, with the Telex and telegraph networks.

Liberalisation in the UK, in addition to stimulating competition in the national network between British Telecom and Mercury, has also resulted in the arrival of a large number of providers of Value Added Network Services (VANS) and

Telex and operate alongside high speed digital facsimile machines. A text message in addition to Videotex, a number of new value added communications services are becoming available such as interactive cable television and videoconferencing. In the longer term, as new switched wideband services become available, the possibility of introducing a network conveying sound and vision at an acceptable cost could become feasible. Services such as home shopping, home banking and even the electronically-delivered newspaper may yet to make any significant impact.

In the area of mobile communication, cellular radio has made a major market impact. Possibilities remain to use the technology as an interconnection as a position location system. New versions of the traditional radio-paging system are now in service with facilities for sending a short verbal message, a text message indicated on an electronic display, a simple diagram reproduced by a dot matrix printer.

How quickly then will the market place accept the current profusion of new equipment and fledgling service offerings made possible by the latest fibre optic and digital technologies? Despite the use of slick consumer-like sales brochures and with even slicker names, initials or acronyms, the reception has been very mixed.

Recent research carried out for the British Government by the consultancy, PA International claimed that about 75 per cent of chief executives in the UK do not regard information technology as an issue which should concern or involve them.

On the positive side, some market areas, notably the travel industry, banks and other financial institutions, have made major investments in information technology systems. This investment is designed to give them a competitive advantage by streamlining their business operations and enabling them to offer new and improved services to their customers. But the overwhelming response from the majority of potential users of the new services has been less than enthusiastic, with the acronym ISDN, for example, said by some to mean "Innovations Subscribers Don't Need."

The challenge facing the equipment and service providers is to deliver on the promise of potential by providing more cost-effective, efficient and higher quality communications. Above all, it involves a significant departure from traditional industry marketing efforts and an ongoing dialogue between users, sellers and regulatory bodies.

Without it, Pandora's Box looms large.

New telecommunications services: the world's telecom administrations are investing heavily in converting their traditional analogue networks to handle the digital language of the computer, as Bob Raggett reports here.

ing new services and facilities ranging from telemarketing to disaster recovery processes.

By the middle of this year the number of VANS service-providers has grown to about 150 with the number of operational or planned services estimated at about 600. Of these, the majority offer non-speech services and included on-line database access, telex bureaux and electronic mail.

In the speech area, the most common services offered are voice messaging and telemarketing. It is predicted that the UK will lead the European-wide take-off of VANS from 1986 with a growth rate of about 50 per cent per annum to 1990. The UK market is forecast to grow from about \$210m this year to almost \$1,400m by 1990.

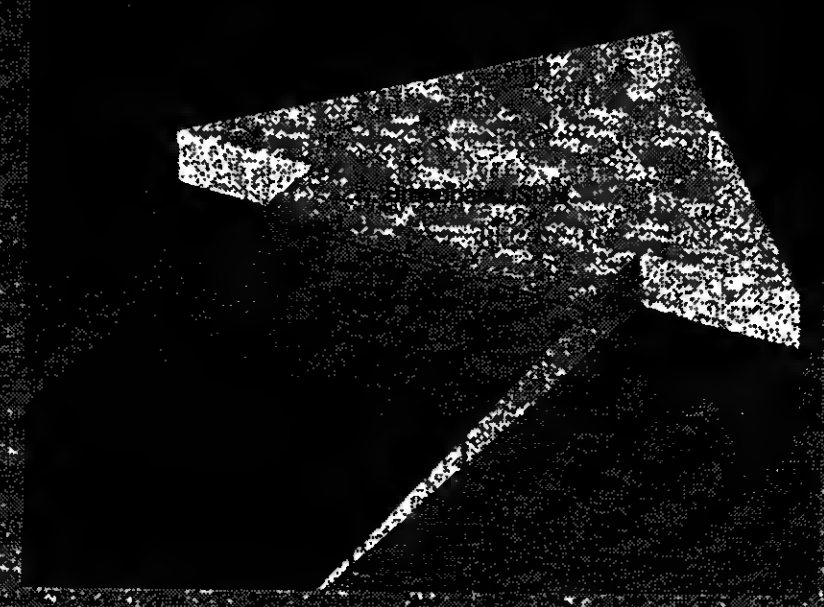
Electronic funds transfer—providing point-of-sale credit, automatic cash dispensing and interest transactions—is coming increasingly into use as are now low-volume data services for telemetry, telecontrol and alarms which could, for example, be used by the gas and electricity utilities for domestic meter reading.

In the area of text transmission, Telex is expected to maintain its position as the most significant electronic mail service well into the next decade. The more sophisticated Telex service is now in operation in a number of countries and will eventually eclipse



SIEMENS

# AWSD SDN



...and Software is  
...requirements  
...incorporated  
...result  
...switching system  
...  
...international  
...is a  
...use anywhere in  
...country 38 telecom  
...27 countries have  
...52 million line units of  
...  
...developments  
...Furtth 2  
...Germany



Communications 4

US long-distance battle hots up

New contenders are entering the US long-distance telephone service market, bringing fierce competition on all fronts, reports Paul Taylor.

THE \$50 bn-a-year US long-distance telephone market is in turmoil. The Bell System break-up has ushered in a period of intense price competition, structural change and regulatory upheaval.

American Telephone and Telegraph's long-distance unit, AT & T Communications, still dominates the market place, but its market share has slipped as MCI Communications—now bolstered by its strategic alliance with International Business Machines (IBM)—GTE Sprint and other cut-price common carriers have used technology, aggressive marketing and cost-cutting to grab a growing share of an expanding market.

Now some of AT & T's competitors, consumer lobbyists and Congressmen are questioning whether deregulation has gone too far. AT & T's AT & T—whose long-distance telephone business is still closely regulated—argues forcibly that deregulation has lagged market realities and that it is being forced to fight a battle with one arm tied behind its back.

The long-distance market remains vital to the new AT & T. Despite new competition, AT & T Communications provides about half of AT & T's total revenues and over half its operating income.

In motion a process designed to "phase in equal access" for long-distance telephone companies to local telephone networks, thereby creating a competitive "level playing field" and, in the process, fostering a closer relationship between customer service charges and costs.

Beginning last year, local telephone companies were required to provide the equipment necessary to allow all the long-distance telephone companies "equal access" to the local telephone network.

At the same time the 90m telephone subscribers in the US are being asked for the first time to choose a long-distance carrier. This process has been dubbed "the great US telephone election campaign" and while the process has caused considerable customer confusion it has also forced long-distance telephone companies to undertake an advertising blitz to their scramble to retail, or expand, market share.

The long-distance competitors are spending heavily on rebuilding, upgrading and expanding their systems because as access charges paid by AT & T and the other common carriers (OCCs) converges pricing flexibility—and therefore ability to increase market share—will depend largely on operating and capital costs.

United Telecommunications, parent of US Telecom, another long-distance competitor, spent almost \$69m on construction and plans to build a national fibre-optic cable network.

But the introduction of equal access is bringing about some dramatic industry changes including a wholesale cost restructuring of the US long-distance telephone market and the elimination of the historic subsidy of local service by long-distance calls.

Mr Theodore Brophy, GTE's chairman and chief executive, told security analysts in New York in November that "results turned negative late in 1984 as the result of steeply increased access charges and other regulatory problems, as well as capacity constraints."

He added that although GTE has solved its capacity problems—which at one stage forced it to turn away some customers to GTE Sprint's losses this year could be higher.

These pressures have led GTE and some of the other OCCs to mount a determined lobbying campaign in Washington to persuade the US Federal Communications Commission (FCC) and Congress to slow down some aspects of the deregulation process—particularly the reduction in OCC access charge discounts—and change what GTE's Brophy describes as the FCC's "transition policies which are heavily biased towards AT & T."

last year fell by 19.4 per cent to \$7.5m and GTE's common stock fell 20.1 per cent to \$19.8m in the first nine months last year (1984), compared to operating profits of \$87.1m in the two-year period.

Mr Theodore Brophy, GTE's chairman and chief executive, told security analysts in New York in November that "results turned negative late in 1984 as the result of steeply increased access charges and other regulatory problems, as well as capacity constraints."

He added that although GTE has solved its capacity problems—which at one stage forced it to turn away some customers to GTE Sprint's losses this year could be higher.

US long distance telephone service

Table with 5 columns: Company, 1984 revenue \$m, \$ months '85 rev. \$m, 1984 market customers m, 1984 market share %.

† Definitive agreement for MCI to purchase from IBM all assets and operations of S.B.S. in exchange for approximately 46.7m shares of MCI stock.

• GTE Communications Services (including GTE Sprint and Telcel)

Research Associates: Riva Nichols

Results for AT & T and seven operating companies

Table with 6 columns: Company, 1984 Revenue \$m, 9 months 1984 Revenue \$m, % change on '83, 1984 net income \$m, % change on '83.

Profits rise for US regional companies

WHEN THE court-mandated break-up of the Bell system was announced last March, Wall Street worried that the seven regional companies (RHCs) had pulled the short straw.

Two years later it is already clear that, while many challenges and uncertainties remain, the "baby Bells" have struck out on their own with a gusto that has surprised virtually everyone.

AT & T's results in the first three quarters last year show a substantial gain over the 1984 period, but this largely reflected the group's sub-par performance in the first year after divestiture.

AT & T's results in the first three quarters last year show a substantial gain over the 1984 period, but this largely reflected the group's sub-par performance in the first year after divestiture.

expect dividend increases of between six and 10 per cent next March.

Some, led by US West and Ameritech, are lobbying to move back into telecommunications equipment manufacturing and long-distance services—both activities banned by the court-

profit performances by the new US regional telephone companies have surprised Wall Street, as Paul Taylor reports from New York.

AT & T's results in the first three quarters last year show a substantial gain over the 1984 period, but this largely reflected the group's sub-par performance in the first year after divestiture.

selling long distance telephone services, making their own equipment or obtaining more than 10 per cent of their revenues from new and unregulated businesses.

The RHCs do not however, appear—amongst state regulators—leaving these rules unchanged. In Washington they have mounted determined lobbying efforts to change the ground rules—efforts which many industry analysts believe will eventually bear fruit and which could, in essence, amount to a tearing up of the original consent decree.

The driving forces behind this near-stampedede are competition, technology and regulatory change. The RHCs fear that unless they diversify they could find their local telephone monopoly threatened by satellite technology, including non-Bell optical fibre systems and cable TV operators who have already started selling local services to big corporate customers.

The pressure extends right to the heart of the local Bell companies' business. Long-distance carriers are already allowed to offer local toll calls in 10 states and under a recent FCC ruling AT & T will be allowed to bypass local telephone networks to deliver its popular "800" and Wide Area Telephone Service (WATS) directly to business clients.

In response, the RHCs have been searching for longer-term alternatives to local telephone services to enhance revenues and earnings. Among these are:

• Publishing—building on their inherited \$5m-a-year Yellow Pages business several of the RHCs have begun expanding their publishing and advertising empires.

• International—all of the RHCs are trying to sell their telephone system expertise overseas.

• Computers—Nynex, Bell Atlantic and Pacific Telesis, have all established chains of retail computer stores.

• Financial services and property—among the regionals, US West has emerged as the most aggressive in this field building up a \$70m portfolio of outside properties and paying \$74m for two commercial lending companies.

• Mobile communications—the RHCs are operating cellular networks in their own areas but some are seeking to go nationwide. Among them, Pacific Telesis raised eyebrows recently by announcing plans to pay \$43m for Communications Interiors, a Dallas-based company which sells paging and cellular services in 15 states.

The ring is, in fact, physically and electrically compatible with the US electrical engineering industry (IEEE) token ring standard 802.5, and IBM has declared it will be an "open" system, publishing the interface specifications so other manufacturers can build on its foundation.

Those other manufacturers remain wary, however. European and other manufacturers continue to push for the adoption of international agreed standards (the so-called ISO model) which would mean in theory that any piece of computer-based equipment could be connected to any other. As Dr. Robb Wilmet, chairman of ICL, noted in a recent paraphrase of the old industry management adage: "information services motto should be—no one ever got fired for buying products to international standards."

With the move, the networking and all its attendant complexities, the ball moved firmly

Alan Cane

Confusion for business customers

In the US, business customers now find themselves with a bewildering range of end-users options, following the break-up of the Bell system, as Lawrence Gasman reports.

of going to AT&T for all their telephony needs.

With the Bell break-up, business customers were forced into a bewildering multidivided environment. The "typical" long-distance business call is now the responsibility of many parties.

It starts with being routed through the customer's own equipment (CPE), itself probably obtained from several vendors, then on through the facilities of the local Bell telephone company to a long-distance carrier such as AT&T, MCI, or GTE Sprint.

The long-distance carrier then switches the call to the Bell company that serves the called party, and finally the call goes to that party's CPE. If something goes wrong it can be blamed on the customer's own equipment, or on the local telephone company, or on the long-distance carrier. (And everyone wants to blame the next person!)

Considerations The demise of AT&T's so-called end-to-end responsibility for the network has left many business customers wondering whether they could achieve more flexibility and control by installing their own private corporate communications systems, rather than relying on the public switched network.

Another reason for building private communications networks is to "bypass" the local loop. This saves the business customer from having to cover the cost of the excess fees that long-distance carriers have to pay the local telephone companies for interconnection to their public facility.

Most private networks now in operation are based on leased lines or on microwave links owned by the subscriber and purchased from companies such as Spectrum Digital. Cable television and even cellular radio networks are being used in local bypass networks.

The size of some private networks can be enormous. The largest such system in the US was built by the aerospace company, McDonnell Douglas, and consists of \$88m-worth of voice,

data, facsimile, teleprinter, and video communications systems.

It has 11 digital switches which serve more than 200 buildings and 54,000 telephones. If this system were a public telephone company, it would rank in the top 25 telephone companies in the US.

But unlike McDonnell Douglas not all business customers want to try to recreate the old Bell System in their own back yard. Most have more restricted aims. The US Customs Service, for example, has recently installed its own private data network, based on packet switching equipment from BBN Communications.

This system will link 2,900 terminals at around 300 border points in the US, Canada, and the Caribbean to data processing centres in the US. The network can be expanded to include certain operations of the Internal Revenue Service and the Treasury Department.

It is not just business and government agencies that are building their own private communications networks—universities are also in on the act. In the past few months, for example, the University of California at Irvine has installed an Ericsson ED10 system with a configuration that includes four switching nodes, linked by conventional cable, fibre optic cable, and microwave. The 3,400-line 66-building system has been handling 10,000 intra-campus calls and 30,000 off-campus calls daily.

Private networks based on leased lines and connecting PBXs, data terminals or tele-

printers have in fact been in use for some time. Those companies that have historically relied on private networks have to some extent been insulated from some of the chaos surrounding the Bell break-up. At least they knew the rules of the in-house game.

Thus, according to a communications official at Ford who did not wish to be identified, "the impact of the Bell break-up for Ford has been lessened by the fact that we have our own in-house facilities."

Nevertheless, the Bell break-up has changed the economies of the private network as leased line tariffs have changed and access charges have been imposed.

Furthermore, some of the old rules are going out of business. Allis-Chalmers used to have a private network linking 100 locations in 1981. Now this number is down to 10 and will have dropped to five by next year.

Expensive But all such networks, new and old, are expensive to install and operate. While installing a network is a major expense, the advantages of a private network would also rather avoid the headaches associated with their day-to-day operations. This should mean a booming market for virtual private networks.

These networks are operated by common carriers and rely on sophisticated software which allows lines to operate as if they were dedicated.

Centrex, a service which offers PBX-like features through the telephone company local switch, is enjoying a renaissance. Before the Bell break-up Centrex was in decline because AT & T wanted to push PBX sales. The divested Bell companies have less committed to marketing PBXs and have revived Centrex.

One change in particular is that in some areas, Centrex is now being offered to companies with as few as one hundred lines. Prior to the Bell break-up the smallest customers with Centrex had 1,000 lines.

Another development affecting smaller businesses is the advent of shared-tenant communications. Here, an office building occupied by more than one company is wired for sophisticated data communications, with these facilities being shared between all or some of the occupants.

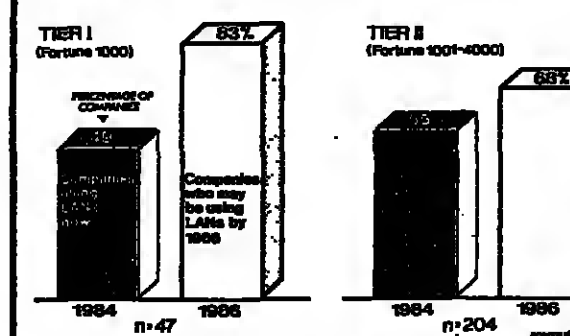
There are about 250 existing or planned multi-tenant communications projects in the US. Finally, on the horizon lies the ultimate digital network, the Integrated Services Digital Network (ISDNs). By the 1990s, this will provide access to digital transmission through compatible terminals, plugged into the system with much ease as telephones are plugged in now.

The writer is US Editor of the newsletter Letter from the Telecommunications Markets and Marketing, published monthly in London by CommunCorp.

The next big surge in office information systems depends on wider integration of equipment

Office automation remains haphazard

Rising interest in local-area networks



the panacea to solve a range of communications problems. Growth in number of companies claiming they will increase use of LANs is staggering.

Not only must it be possible to increase over the next two years.

So the next surge in office automation seems to be dependent on the emergence of cheap and effective methods of connecting together all the principal elements of the office, telephones, word processors, personal computers, electronic file stores, facsimile machines, printers, copiers and so on.

(Note well the use of "company" and "intranet", this included integrated approach, although well worked out in

communications between computer and computer or computer and man, are complicated, very expensive and cumbersome.

The best-known and most researched LAN is Ethernet, developed, as were so many ideas of how the electronic office should be implemented, at the Xerox Palo Alto Research Centre.

A number of manufacturers have now developed LANs to Ethernet specifications. It comprises a single data communications channel or "bus" to which all the communicating components are attached through a simple connector. Stations "listen" for activity on the bus and then send messages. If all seems clear, if messages collide, both stations cease sending for an arbitrary period then try again. Statistically, all the messages will eventually get through.

Ethernet can operate at very high speeds—up to 10 million bits of data a second—but its efficiency drops as traffic increases.

It was expensive to install—\$800 or so for a connection—and that, coupled with the novelty of the integrated approach to office automation, meant that while interest was high, sales were lukewarm.

Furthermore, a significant administrative change was taking place. While low-cost professional computers and cheap software was being installed, the balance of power in data processing swung away from the data processing professionals to the end-users.

With the move, the networking and all its attendant complexities, the ball moved firmly

FROM TELECOMMUNICATIONS TO ELECTRONIC SERVICES. The report of the major IBC Study of Telecommunications Structures in the US, Canada, Finland, France, Germany FR, Japan and the UK. The report focuses on: • the various national approaches toward... • drawing boundary lines between different kinds of services or distinguishing between various service providers; • the problems of moving towards cost-based pricing for transmission offerings; • the global changes in the telecommunications sector and how countries are managing the transition to new industry structures; • the need for new approaches and mechanisms to address policy problems and industrial trends on a worldwide basis. Price: £1,000. To order or for further information contact IIC.



# Pressures mount on European suppliers

TELECOMMUNICATIONS manufacturing is regularly singled out by national and EEC policymakers as the only major sector in which Europe still looks able to mount a serious industrial challenge to the high-technology superiority of the US and Japan.

On paper, Europe's position appears promising. In contrast to the computer and semiconductor industries, where European suppliers have been reduced to minor roles even on their own home markets, EEC countries collectively enjoy a trade surplus in telecommunications equipment of about \$1bn a year.

The European industry can boast a solid record of technical achievement and innovation, including the development of pulse code modulation, one of the key elements in digital communications. Moreover, Europe has a large number of telecommunications manufacturing companies, several of which have established good export positions in "emerging" (mainly third world) markets.

However, the outlook for the European industry is more precarious than these facts would seem to imply. The structure of the industry — as well as its main geographic markets — is fragmented. Much of its production is in sectors where there is excess capacity, notably in public switching.

European companies have also lagged in fast-growing world markets to private systems. According to Dr Henry Ergas, a telecommunications economist with the Organisation for Economic Co-operation and Development, "The new generations of telecommunications terminal equipment — be they modems, FAXs, or communicating workstations — are not being pioneered in Europe."

The bread-and-butter (and much of the jam) of the European industry remains the sale to telephone network operators of public telecommunications equipment, and particularly telephone exchanges. However, this business is being squeezed from both ends.

The investments needed to remain technologically competitive are soaring. The latest families of digital public exchanges each cost \$500m to \$1bn to develop, largely because of the huge cost of writing the intricate computer software they use. The annual expenditure needed to keep their design up to date is likely to be \$100m or more for each system.

About a dozen different suppliers are offering digital exchanges in Europe, against only

three major contenders in the U.S. Furthermore, while the American market is about 40 per cent of the world total, no European national market amounts to much more than 5 per cent.

No broad-range supplier can any longer survive solely on such a small market share. Moreover, European administrations are increasingly splitting orders between two or more digital systems: British Telecom's decision to pit the AXE exchange developed by L. M. Ericsson of Sweden against System X made by Plessey and GEC is only the latest example.

Some European companies, notably Philips of the Netherlands, France's Thomson, Britain's STC and Hasler of Switzerland, have already been forced to drop their own exchange development programmes. Most others are anxiously seeking ways to secure their survival.

There has also been a wave of defensive rationalisation moves between telecommunications manufacturers in several European countries. In France, Cit Alcatel has taken effective control of Thomson Telecommunications; in Italy, a merger has been agreed between Italtel and Telettra; and in Britain, GEC has launched a takeover bid for Plessey.

These measures may go some way to removing excess production capacity. But they seem unlikely, on their own, to provide long-term solutions to problems of international competitiveness. A race is now on between major European manufacturers to forge international alliances with stronger partners.

There have been repeated attempts at rapprochements between European companies. But so far, these have achieved little progress, in part because European suppliers share many of the same weaknesses. Long encouraged by their governments to think of themselves as "national champions," the leading European companies seem unwilling to make the reciprocal concessions which more than token collaboration would require.

It now appears more likely that the main axis of the European industry's future alliances will be transatlantic. Both Philips and Olivetti of Italy have already formed close links with American Telephone and Telegraph, while IBM is pressing hard to establish ties with national telecommunications authorities (PTTs).

Even in France, which has enthusiastically supported the idea of intra-European collaboration, the state-owned CCE group, the parent of Cit Alcatel, is in advanced negotiations on a deal with AT&T. So far, the French Government has opposed any link-up: the Government was strongly critical of the AT&T-Philips agreement two years ago, which it condemned as treachery to the European cause.

West Germany's Siemens, probably Europe's strongest electrical and electronics group, is openly dismissive of talk of an "all-European" strategy in telecommunications manufacturing. It is pinning many of its hopes on the US, where it is spending \$200m on an attempt to enter the public exchange market and is discussing proposed collaboration with GTE, the second largest American telephone company.

Ericsson, Plessey and Cit Alcatel are also seeking to establish bridgeheads in the US public exchange market, though with mixed success so far. Siemens is the only European company to date to have won an order from one of the Bell regional telephone companies which are the main customers for public exchanges.

Many of the European industry's problems stem from the

## The switching market in Europe

1974		1984 (digital switching)	
Austria	Siemens 70% ITT 10% Local manfct: ITT patent	Siemens ITT 50% Local manufacturer 50%	
Belgium	ITT 80% GTE 20%	Northern Telecom Patent ITT 80% GTE 20%	
Denmark	Ericsson 70% ITT 10% Siemens 20%	Ericsson 80% ITT 20%	
Finland	Siemens 20% Ericsson 60% ITT 15% Siemens 5%	Cit-Alcatel (patent) 50% Ericsson 30% Siemens 15%	
Spain	ITT 25% Ericsson 25% ITT 45%	ITT 70% Ericsson 30%	
France	Ericsson 15% Cit-Alcatel 40% Plessey	Cit-Alcatel Thomson 1 CCE 16% Plessey GEC } 100%	84%
UK	ITT GEC		
Greece	Siemens 40% ITT 40% Philips 15%	n.a.	
Ireland	Ericsson 65% ITT 25%	Cit-Alcatel 40% Ericsson 40%	
Italy	Italtel 50% ITT 20% Ericsson 15% Ericsson 60%	Italtel and Second pole ITT 100%	
Norway	ITT 40% Philips 15% Siemens 55%	Philips ATT 75% Siemens 60% ITT 40%	
Holland	ITT 30% Telade 15% ITT 50%	n.a.	
W. Germany	Siemens 100%	Ericsson 100%	
Portugal	ITT 35% Siemens 30%	n.a.	
Sweden			
Switzerland			

Source: Europe and the New Technologies.

## Comparative Investments

	Telecommunications equipment market 1981 (\$m)	Population (m)	\$/Capita
EC total	8,620	278.66	31.26
Japan	5,310	116.78	45.47
US	18,300	227.66	80.38

Source: Arthur G. Little

compartimentalisation of the national markets and suppliers' heavy reliance on protected orders and subsidies from their national PTTs.

Some critics argue that this dependence has robbed the European manufacturers of the spirit of enterprise. Sir George Jefferson, chairman of British Telecom, described them last year as "introspective and non-risk taking captives of monopoly customers."

Because they have enjoyed large orders from their national telecommunications authorities, which buy almost three-quarters of their output, few European telecommunications companies have made much effort in the past to develop their own marketing and distribution resources.

This is starting gradually to change, as the companies

# Britain sets the pace for reform

THE INSTITUTIONAL structure of state-dominated monopoly which has governed the European telecommunications industry for most of this century is starting to shudder and flex under the impact of technological, economic and political pressures.

In Britain, the system has already been cracked decisively by the programme of market liberalisation launched in 1981 and by the sale to private investors last year of just over half the Government's stake in British Telecom.

At present, Britain's experiment is by far the boldest break with the past made anywhere in Europe. But in many other countries, debate about the reform of telecommunications policy has been gathering momentum and in some cases is starting to produce action. For example:

● In West Germany, a Government-appointed committee is reviewing national telecommunications strategy and the role of the powerful Bundespost (Post Office).

● In the Netherlands, the Government has reached an advanced stage in considering proposals to inject private capital into its PTT (telecommunications authority) and break its monopoly over the supply of subscriber equipment.

● In Italy, 30 per cent of SIP, the principal state-owned network operator, was sold this year to private investors.

● In France, right-wing opposition parties have indicated that they may press for measures to reduce state intervention in the national PTT if they win power in next year's parliamentary elections.

● In Ireland, the PTT was turned at the start of last year from a government department into a state-owned company.

A prime motive in each of these developments is the desire by policymakers to transfer their national PTTs from civil service bureaucracies into more commercial enterprises, equipped to exploit more effectively the economic benefits of advances in communications and information technology.

However, the changes are taking place in a largely uncoordinated way. In spite of efforts by the European Commission in Brussels to nudge governments towards a common telecommunications policy, individual countries are all still

pursuing different courses and timetables.

Hence the near-term prospects for a concerted attempt to reduce the jungle of incompatible rules and regulations which keep Europe's telecommunications market divided do not look particularly promising. Even in areas where the need for standardisation is universally accepted, such as the new generation of ISDN services, progress is halting and fragmentary.

In Western Europe, the debate over telecommunications reform is gathering momentum, although changes in some countries are taking place in a largely uncoordinated way, as Guy de Jonquieres reports.

The maintenance of Europe's market patchwork imposes a high price, both for suppliers of equipment and services and for telecommunications users. Equipment which is legal in some countries is prohibited in others, the kinds of service provided vary from country to country and there are huge discrepancies between national tariff structures.

Within countries, moreover, the search for a fresh approach to telecommunications policy is fraught with complexity—and confusion. For example, the terms "privatisation" (of the PTT) and "liberalisation" (of the market) are still used interchangeably in many continental countries, even though Britain's experience has shown that in practice they refer to quite different—and sometimes conflicting—actions.

In most European countries, the PTTs have long had two principal roles. One is to provide nationally the infrastructure and services for modern telecommunications. The other, which has evolved steadily ever since, is to promote and support the interests of domestic suppliers, industries through spending on research and development and procurement.

Reconciling these two functions is, however, becoming an increasingly delicate task. In

the interests of getting better value for money, PTTs have started to adopt competitive tendering policies for many larger items of equipment; in most countries, public exchange orders are today split between two or more systems.

Inevitably, this trend is creating tensions. In France, the PTT protested vigorously a few years ago when its two biggest suppliers, Cit Alcatel and Thomson, merged. British Telecom's decision this year to order L. M. Ericsson AXE exchanges and its bid for 51 per cent of Canada's Mitel aroused strong resistance from Plessey and GEC, its main traditional suppliers.

At the same time, international competition and customer demands for wider choice are bringing pressures for change in the PTTs' roles as service providers. The outbreak of a price war last year between US carriers on the transatlantic route has prompted many European PTTs to cut their tariffs to North America and to compete more vigorously for traffic.

Because international calls are immensely profitable, price changes are bound also to have repercussions on PTTs' domestic tariff structures. BT has already begun rebalancing its tariffs to reduce the traditional cross-subsidy between profitable business customers and unprofitable residential services, and France plans to follow suit.

Other countries, such as West Germany, are still resisting such adjustments, which are politically controversial. However, it is uncertain how long they can continue to hold out without damaging their own revenue base.

The danger they face is that, by setting tariffs for highly profitable services far above the cost of providing them, they may encourage business customers to route as much traffic as possible through countries which offer more attractive prices.

The increasingly broad spectrum of services which technology is making possible, and insistent customer demands for wider choice, is also making PTTs pay closer attention to marketing.

Since 1981, BT has launched a battery of new services aimed

CONTINUED ON NEXT PAGE

# Actual size.

## Actual Fax.

What you are reading was 'faxed' between London and New York. Judge the standard of reproduction yourself. And remember it has suffered from being printed in this publication.

It cost less than £1 to send. If it had been sent to Rome it would only have cost 60p. And if you'd only sent it locally it would have cost just 6p. (Based on the new standard rate charges).

To produce this fax we used the new British Telecom MerlinFax machine.

As you can see, the MerlinFax is no bigger than this page.

MerlinFax is the very latest of the Group 3 fax machines and is able to communicate with nearly 1½ million other fax machines around the world. No matter what make they are.

There are over 38,000 fax machines it can send to and receive documents from, in this country alone.

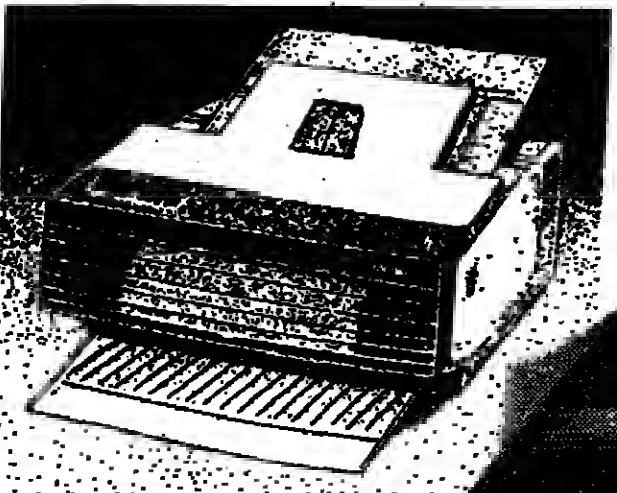
16,000 of them can be found in the UK Fax Directory.

It can send invoices, letters, drawings, graphs and illustrations, using a normal telephone line.

It can receive documents even when it is unattended and confirms receipt of each copy it sends with a verification mark.

And, of course, for back-up, MerlinFax has the resources of British Telecom.

The price is a highly competitive £2,795 plus VAT.



For more information call Freephone Merlin, phone 01-631.2445, or post to: Victor Brand, BTBS, FREEPOST, London SW19 8BR.

Name \_\_\_\_\_ Address \_\_\_\_\_  
Company \_\_\_\_\_

Tel No. \_\_\_\_\_ FT6/1/F





Communications 6

BT responds quickly to fend off its rivals

**A stimulus to competition in the UK has benefited customers, but British Telecom remains the major player, Jason Crisp reports**

SIX YEARS ago telecommunications in Britain was wholly the responsibility of the Post Office which was only answerable to the Government. It behaved rather like a majestic old cruise liner which had seen better days — shabby, slow to move or turn, and with an unhelpful crew. The officers seemed to believe it had the right to roam the seas alone, forever.

The then new Conservative Government — with more complaints than telephones ringing in its ears — set about the old tub with an enthusiasm which was inspired by the sleek and fast liners to be seen on the other side of the Atlantic.

The result was a major rift which divided the Post Office into two, with the telecommunications side becoming British Telecom and a new set of rules which allowed a variety of other vessels to ply their trade.

The Government's vision at that time was to create a vigorous and competitive telecommunications business. British manufacturers, freed from the restrictions and constraints of a monopoly telecommunications buyer, would spring forth in a vigorous and dynamic manner, it claimed. On top of that, all business would benefit from the new products and new service which would result from the stimulus of competition.

Up to a point this scenario has been true, but not always in the way that was expected or probably desired. Undoubtedly, the business customer is much better served than before — which was not too difficult, given the woeful level of service at the time. But finding signs of a flourishing British telecommunications industry outside of BT itself is not such an easy task.

**Reinforced**

Two events have happened which have reinforced British Telecom's position in the UK. First, it has responded to the threat of competition with commendable speed and enthusiasm, and as a result, has exploited its *de facto* monopoly position to the full.

Second it has been helped to retain this position by the government itself which wanted to maximise the return it received from the sale of shares in BT last year.

The privatisation of BT provided the greatest single contradiction in the Government policy because it meant a reinforcement of monopolies that many — other than investors — thought should be relaxed. In addition, the Government's rush to sell BT meant it was obliged to offer it as a single entity. Again, there was a view that competition would be stimulated by splitting BT.

However, its structure and weak financial systems meant a break-up would not have been possible in the short timescale for privatisation envisaged by the Government. There was the further factor of BT's possible role as the flagship of Britain's information technology business. By keeping BT as a single entity — with an expected turnover of more than £5bn this year — has a powerful base from which to expand internationally.

The impact of competition in the three main areas of telecommunications — equipment, special services and the basic networks — has been mixed.

BT has retained a surprisingly large share of the equipment market from telephone handsets to large and powerful private exchanges, (PABXs). Its success in the PABX market has left little pickings for those companies entering the British market as a result of liberalisation.

A study earlier this year showed that 70 per cent of PABXs had been replaced in the past four years and some 90 per cent of them were supplied by BT which took advantage of the long time it has taken to liberalise this particular market.

But as PABXs have an expected life of at least eight years there is very little of the present market left for all the new entrants to capture. Indeed, sales of PABXs are likely to fall quite sharply over the next few years until a replacement market develops.

The much-hyped liberalisation of value-added network services (VANS) has so far turned out to be a damp squib. Although several hundred services have been registered there have not been great signs of activity. This outcome has, to some extent, been hampered by Government prevarication over the regulations.

The most interesting developments have been the formation of STC Network Systems within ICL to bring together the STC-ICL networks under one roof. On the export front, STC has in the past year won further large orders from China and the US for optical transmission equipment.

What now looks like being the most dramatic result of the UK's liberalisation did not start out that way. When Mercury was set up four years ago as a joint venture between Cable and Wireless, BP and Barclays Merchant Bank, it was only intended to compete for a very small sector of the telecommunications network traffic.

The original plan was to provide high-speed point-to-point computer links for companies. It was to be restricted to England only with no international connections and without a dialled service. Mercury is now a wholly-owned subsidiary of Cable and Wireless, and will be competing with British Telecom for almost all telephone services.

**Own network**

Early next year it will start a dialled service for all the country which will be achieved through interconnection with BT's own network. Mercury already has international links which are being expanded. Initially it is offering its services to business customers, but in 1987 may also compete for residential telephone users.

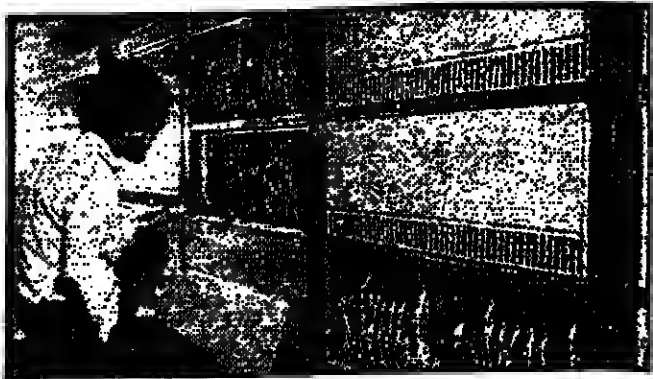
Mercury's greatest breakthrough was the rolling out interconnection with BT which was made in October by Professor Bryan Carsberg, director-general of the Office of Telecommunications.

As a result of that favourable ruling, Cable and Wireless has decided to bring forward its investment plans for Mercury. It means it will extend its links to Scotland and Wales sooner. In addition, the company is looking at expanding its local network in London and extending its trunk network to the south coast.

As a result of the considerable legal, commercial and regulatory changes in Mercury, analysts have increased their expectation of the company. It is now expected to grow very rapidly and make substantial profits.

Although Mercury still has much to prove, it does look like being the most successful product of the government's telecommunications policy. The other area of success is in cellular radio where two operators have been licensed to compete with BT. British Telecom with Securicor and Racal with Millicom, a small US company.

Other than with Mercury and cellular radio, Government policy on liberalisation has only had a very limited success. There is little sign so far of healthy and vigorous competition developing to compete with BT. But it is also true that BT has improved so much few would recognise it from the tired old ship it once was.



AXE digital switching systems have been very successful on world markets. Britain is one of 62 countries which has selected the system — the exchanges in the UK network will be produced at Thorn Ericsson's Southampton plant in a contract for BT worth up to £160m.

Initiatives begin to bear fruit

**In France, high priority is being given to a strategy of expansion in the industry, David Marsh reports**

IN LINE with the traditional Gallic policy of giving economic priority to high technology, the French Government is sparing no effort in propelling telecommunications along a growth path. A welter of initiatives conceived and put into operation under both the Socialist and the previous right-wing administrations are now coming to fruition.

More than ever, the Direction Générale des Télécommunications (DGT), the country's telecommunications authority, is trying to play a strategic as well as an economic role by improving expertise and spurring innovation in French communications.

There are still question marks over the eventual economic return of some of the more headline-catching initiatives in areas like cable and satellite communications as well as the Minitel videotext system. More than 1,000 information services are offered via Minitel screens — many of them specific systems designed for companies, as well as an increasing number of data networks offered by banks and newspapers.

**Under strain**

The Transpac packet-switching network linking Minitel to central computers, broke down during the summer with the strain of growing utilisation. With the average number of interrogations by Minitel users still only about 10 per month, however, doubts still remain over the basic economics of the project.

French companies have also been prepping up activities in optical fibres to equip local authorities installing cable links under the DGT's FFR 60bn plan for wiring up France by the end of the century. Lower-than-planned pace of ordering, however, has hit some companies in this sector.

The overall adjustment to a slower rate of DGT orders as well as a general search for increased productivity, has led to workforce cuts at the Alcatel-Thomson group. Mr Georges Pebernas, the chairman of CGE, now says that it is clear that the overall beneficiary of the September 1983 assets swap between his company and Thomson has been the group headed by Mr Alain Cosserat.

Mr Pebernas adds, however, that the deal, concentrating France's civil telecommunications business on CGE and putting the military business firmly with Thomson was crucial for the ultimate survival of both companies.

It is ironic that the US army's \$4bn order for Thomson's RITA mobile communications system — which has given a psychological boost to general French telecommunications marketing abroad — will give extra work above all to Thomson's subsidiary since it is clear a company acquired from CGE under the September 1983 deal.

In the satellite telecommunications area, France now has two Telecom spacecraft in orbit for offering European and overseas telecommunications as well as a military channel for the French armed forces. The most revealing illustration of France's overall strategy on space technology will come next summer with the launch of TDF-1, Europe's first direct broadcasting satellite.

France is launching TDF-1 in the coming year, meaning project first planned with the West Germans at the end of the 1970s — in an area where other nations fear to tread.

In June, a consortium of 21 groups decided that a UK direct broadcasting by satellite project was too expensive and too risky. The broad lines of the TDF-1 project are now known following the Government's decision last November to link it to France's first commercial over-the-air TV network due to open in February 1987.

How satellite TV affects the economic basis of other communications projects — especially in cable networks — will be a big question in Paris during 1986.

Debate over policies

CONTINUED FROM PREVIOUS PAGE

at business customers, while France's PIT has sought to develop a more entrepreneurial approach by setting up arm's length subsidiaries to run operations such as Transpac, its national data network. In the Netherlands, planned liberalisation of the supply of services is intended to bring wider choice. However, there is still a long way to go. The US Commerce Department estimates that the market for on-line data base services in the US is three times bigger than in Europe, where it has been restrained by tight regulation. Many large companies operating in Europe also complain that PITs still do not understand their needs and are often too restrictive.

Many large companies would ideally like in Europe the freedom to operate their own telecommunications services available in the US. However, many PITs would regard that as a threat to their own authority and revenues and are determined to retain control over their markets.

As state organisations which are often part of the machinery of central government, PITs wield considerable influence. Thus while commercial imperatives are starting to assert themselves in Europe's telecommunications policies, they remain bounded by long-standing political realities.

Once-cosy world thrown into turmoil

**New market entrants and British Telecom changes have shaken up the industry, Jason Crisp reports.**

AFTER DECADES of stability and rather limited competition Britain's telecommunications industry has been thrown into turmoil.

This once-cosy world has been shaken by new and forceful entrants into the market from both overseas and the UK and by the considerable changes in British Telecom, a result of liberalisation and privatisation.

Five years ago there were three suppliers of main exchange equipment — STC, the General Electric Company and Plessey — and one supplier of network services, the Post Office. Almost all equipment for use in the home or at work was bought from the Post Office, as it then was, which actively supported British industry. And as a monopoly supplier of equipment and services it did not worry over much if it did not get the keenest price when it purchased goods.

Since then there have been major changes in the supply of public exchange equipment, two new network services (Mercury and Racal Vodafone), and a host of new suppliers of equipment. British Telecom, now separated from the Post Office and with half its shares in private ownership, has adopted a much more forceful and commercial stance both in its approach to markets and purchasing.

As a result of these changes the British telecommunications industry is beginning to look very different. The main changes are:

- Public switching: System X the long-promised and much delayed British developed exchange has been adopted as part of the restructuring. System X began as joint development between BT itself and its three traditional suppliers GEC, Plessey and STC. In

exchange needs from Thorn Ericsson which is to manufacture them at its plant in Southampton. At present it has placed orders for 300,000 lines with an option for a further 500,000. First deliveries do not actually begin until late this year.

Meanwhile, STC which has been the sole supplier of TXE4A exchanges since it stopped participating in the option for a further 500,000. The prospect of a greatly reduced activity in public switching which used to be its core business. Once the TXE4 orders cease it will have effectively withdrawn from the mainstream switching business although it will still have quite a lot of work enhancing TXE4 and supplying spares.

Networks. One of the most important aspects of the government's liberalisation of the whole network with a monopoly, Mercury Communications, now a wholly-owned subsidiary of Cable and Wireless, looks set to grow very rapidly and profitably as Britain's second network.

Mercury started life as a joint venture owned by C&W, Barclays Merchant Bank and BP to provide competition for the domestic leased line market — a tiny proportion of all telephone network services. Thanks to good lobbying by C&W, changes in government policy and the powerful helping hand of Otel, the telecommunications regulatory body, Mercury will become a fully-fledged dialled telephone network with international connections.

The critical decision for Mercury was last year's interconnection decision made by Prof Bryan Carsberg, director-general of Otel. It means that holders of large shares of the market in spite of competition a number of new companies have entered the UK market. These range from a very few small indigenous start-ups to telecommunications giants such as northern telecom of Canada, and British Telecom.

The industry is already looking substantially different after five years of change largely as a result of the government's legislation. Few doubt that the dramatic changes in telecommunications are continuing to make dramatic changes.

Mercury is widely expected to become a substantial company with sales of about £300m a year by the end of the decade, according to analysts. Two other substantial networks are being built in cellular radio mobile telephones which may have up to 500,000 subscribers by 1990.

One is Cellnet, a joint venture between British Telecom and Securicor, the other is Vodafone, largely owned by Racal, and a new company, telecommunications networks, @ Customers' Equipment. While BT has been very effective in holding its own in the market in spite of competition a number of new companies have entered the UK market. These range from a very few small indigenous start-ups to telecommunications giants such as northern telecom of Canada, and British Telecom.

The industry is already looking substantially different after five years of change largely as a result of the government's legislation. Few doubt that the dramatic changes in telecommunications are continuing to make dramatic changes.

Clarification of game plan after EEC entry

**Spain is about to bring in a law which will, among other things, define the position of semi-state company Telefonica, David White writes**

SUPPLIERS of telephone-linked systems are anxiously awaiting a new law due to come into being in Spain later this year. This law will set out the rules of the game for Spain as it enters the Common Market, and it will make clear where the monopoly enjoyed by the semi-state company Telefonica and its control over the sector begins and ends.

The proposed legislation, replacing the contract between Telefonica and the state, is the offspring of a wider-ranging Communications Bill which was withdrawn after a cabinet reshuffle in the summer of 1985 and replaced with three more concrete projects. A telecommunications Bill, and other bills regulating the introduction of private television and the setting up of an autonomous port office, will now all go to Congress separately.

The general idea is that Telefonica should maintain the exclusivity as carrier that it has enjoyed for the past 60 years, but that the modern and equipment side of the business should be liberalised. Telefonica has already begun restructuring its operations in preparation for the change, under which responsibility for approving terminals and other equipment is due to be taken over by the industry ministry.

Up to now, everything linked to the telephone has been very much under Telefonica's thumb, while Spain has remained a country of captive markets. Companies in which Telefonica has direct interests play a dominant role, especially Standard Electric — relic of its long-standing ties with IIT — and Intelsa, a joint venture with Ericsson, which between them supply the bulk of Spain's telephone exchanges.

The role of Telefonica's industrial interests — with sales last year of Ptas 125bn (\$780m)

— has been reinforced in the last three years under the Socialist Government, which has given the company a leading part to play in bringing Spain up-to-date in electronics.

A four-year investment plan which started this year envisages spending of Ptas 925bn and is likely to be overtaken by an even more ambitious five-year project for 1986-90.

According to initial plans, still to be approved by the board, this would total Ptas 1,300bn or more than \$33bn. Investment projects include involvement in private TV, making use of a new cable network. Among the major spending items are the building-up of Spain's data transmission net and the development of telematics and other new services.

Under the current plan, the proportion of Spanish homes with telephones is due to be increased from just under 50 per cent at the end of 1984 to 59 per cent in 1988.

**Financial needs**

The extent of Telefonica's financial needs has made it a permanent sponge for Spanish savings. In recent months it has placed shares for the first time on foreign stock exchanges in order to increase its potential for raising equity funds. This has meant a doubling of the foreign holding in its capital to 13.5 per cent (the Spanish state, directly and indirectly, has 47 per cent).

Spain's prime aim, if its present management, in co-ordination with the Government's far-reaching electronics plan, has been to speed up the entry of new technology and to boost Spain's export capacity in the sector. Telefonica has signed assistance agreements with several Latin American countries and has successfully exported its Tesyts data transmission system to Canada and other countries. It recently signed a deal to set up a Tesyts network in Tunisia, the first of its kind in North Africa and a potential foothold for Spain in Arab markets which are dominated by major European manufacturers.

Aside from this, however, Spain still has little technology it can call its own. Telefonica's strategy is simply to buy in the

best available, and to learn from that. The main plank in this is a \$200m AT & T custom microchip factory, due to be built near Madrid, with Telefonica as majority shareholder and with substantial financial support from the Spanish Government.

In addition a joint VEEF-Japan project is to design and produce computers and office automation systems with Telefonica in Spain. Pacific Telecommunications of California is to collaborate in setting up a research and development centre near Madrid. The structure of the way with Philips on development of mobile telephones; and a \$20m fibre optics manufacturing project has been provisionally agreed with Corning Glass, US leader in the field.

The first stage of an optical cable link between Madrid and Barcelona is scheduled to be ready by the first half of 1987, with the two cities connected by the end of the following year, well in time for the Olympic Games which Barcelona hopes to host in 1992.

Spain's long-distance network with more than 5,000 kilometres of underground cable and 2,000 kilometres of submarine cable planned for 1990.

This "digital motorway" will connect with France and Portugal — and later (by submarine cable, with Britain and Italy) join the EEC's trans-national broadband backbone.

Spain's eagerness to co-opt US, European and Japanese multinationals is criticised by some in the industry who argue that money would be better spent on developing Spain's own technological capacity. But both Mr Luis Solana, Telefonica's chairman, and Mr Juan Majo, who took over as Minister of Industry this year after being in charge of the electronics plan, are convinced this provides Spain's best opportunity to establish a place in the world telecommunications business.

Mr Solana is one man who is a fervent partisan both of Europe's Eureka Project and of the US "Star Wars" project — and if they tell me there is a Japanese project," he says, "I will go for that, too."

**'VANS'**

**RISKS AND REWARDS**

This conference on value added networks and services is for today's decision makers. A compact two days featuring 30 industry leaders speaking on seven major topics.

- Public policies • Managed data networks • The views of pioneers • Trade data interchange • VANS — causes and effects • Technology & VANS • International VANS

4 - 5 March 1986, The Barbican Centre — London

For more information please phone 01-868 4466 or complete the coupon.

**PLUS • PLUS • PLUS • PLUS • PLUS**

From the 1986 ONLINE INTERNATIONAL DIARY

Business Telecom '86 Exhibition and Seminars The Telephone Systems Show London 4 - 6 March Open Systems '86 Conference London 19 - 21 March The International ISDN Conference London 10 - 12 June Networks '86 Conference and Exhibition London 10 - 12 June

Please send me more information on the VANS Business Strategy Conference And on the following Online events

KBS '86 Knowledge Based Systems Conference & Exhibition London 1 - 3 July Voice Processing Conference London 1 - 3 July Wideband Communications Conference London 1 - 2 October

Name \_\_\_\_\_ Company \_\_\_\_\_

Position \_\_\_\_\_

Address \_\_\_\_\_ Postcode \_\_\_\_\_

Telephone \_\_\_\_\_ Telex \_\_\_\_\_

Online International, Pinner Green House, Pinner HA5 2AF Tel: 01-868 4466

مكتبة الأصيل



# Resistance to change remains strong

WEST GERMANY is coming under increasing pressure to show a more liberal attitude to telecommunications which comes as a result of the commercial and technological changes transforming the industry.

This pressure is meeting strong resistance, however. Although some changes seem inevitable, it is likely to be very difficult to overcome the conservative and monopolistic views that hold sway among the West German authorities.

The authorities have a "breathing space" at the moment while a commission of inquiry looks into the wide-scale revolution in telecommunications. The 12-member commission began its work last April. It is expected to report to the Bonn government in spring, 1987—shortly after the next federal election.

The commission, headed by Professor Eberhard White of Munich, has members from universities, business and politics. The business members include Mr Jürgen Terrae, a member of the managing board of Commerzbank.

The politicians include Mr Peter Glotz, a leading Social Democrat with a reputation for pragmatism, and Mr Edmund Stoiber, a prominent member of Mr Franz Josef Strauss's Christian Social Union (CSU) in Bavaria.

Members of the commission have already been sending out companies, individuals and industry associations for their views on the telecommunications sector. Formal hearings are being planned. The commission will also go to the main countries which have espoused liberalisation, visiting the UK in March, the US in April and Japan in September.

It is widely felt that some liberalisation will flow from the commission's report, but expectations at this stage are not high.

Much could depend on the outcome of the federal election at the beginning of 1987. In particular, a lot could hinge on the fortunes of the much less influential Free Democratic Party (FDP). As part of its resourceful will to survive, the FDP has embraced the role of ardent champion of liberal enterprise, and not surprisingly, one of its chief targets is the Bundespost, the mammoth postal and telecommunications authority.

Mr Martin Bangemann, the FDP leader and Economics Minister, has already seized opportunities to attack the Bundespost's tight control over the marketing of telephone equipment. The Economics

Ministry, for many years an ardent defender of the status quo, is now a long-running antagonist of the Bundespost.

It is conceivable that the FDP may exploit the Bundespost's vulnerability in the party's manoeuvring and campaigning in the run-up to the next federal election. If the FDP wins more seats and if the coalition government as a whole is returned, this could add to pressures for more liberalisation in telecommunications.

The main coalition parties—Chancellor Helmut Kohl's Christian Democratic Union (CDU) and its Bavarian sister party, the Christian Social Union—have mixed feelings about restructuring telecommunications. On the one hand, they are anxious to ensure the right framework for business to thrive, but on the other hand, they see political risks and disadvantages in the US, UK and Japanese models.

**In West Germany, the telecommunications authorities are dominated by monopolistic views, as John Davies reports here.**

"They are reluctant to risk the 'flak' which might arise if liberalisation favours business while disadvantaging private shareholders or sensitive regions. Although they stand for a free market economy, they feel obliged to stand behind national equipment suppliers, such as Siemens, in their struggle against foreign competitors. Inevitably, the pressures for change are mounting, however. Companies are becoming increasingly concerned that the Bundespost is too slow and too restrictive. Business is concerned about the cost of Bundespost services. With liberalisation opening up opportunities (as well as risks) in other countries, companies in West Germany are becoming less competitive. Some international companies are inclined to look elsewhere for sites for communications projects.

Loud voices were raised against the Bundespost recently by the Government's Council of Economic Advisers—the so-called 'five wise men.' As part of wide-ranging recommendations, they urged the Government to speed up the Bundespost's activities. In their view, the Bundespost can no longer keep pace with telecommunications

Pressure has also come from the US, which wants the Bundespost to give foreign equipment suppliers more chance of winning orders. Senior West German officials were at pains to placate US representatives at a recent meeting in Munich.

The Bundespost itself, while defensive of its policies, is only too well aware that it has immense problems. With well over half a million workers, it is the country's biggest employer. Its postal division is struggling to rationalise and update its operations, but must reckon with a strongly unionised workforce (as well as a demanding public). Without telecommunications subsidising it, the postal service would find the going harder.

Overall, the Bundespost is a useful contributor to the Government's finances and this, too, is an element in the conservative approach to telecommunications restructuring.

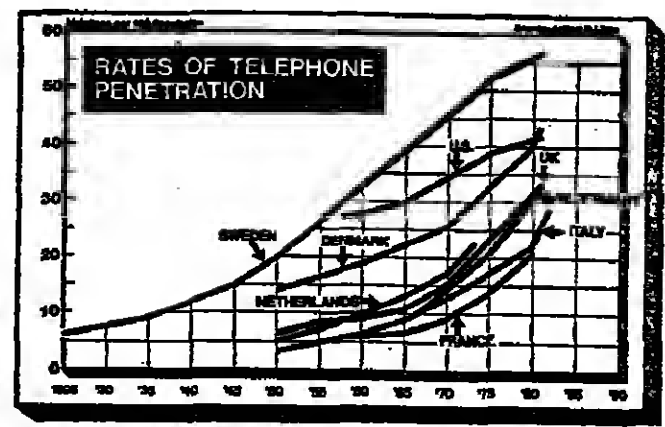
In 1985, the Bundespost is budgeting for a lower net profit of DM 2.86bn, compared with a budgeted profit of DM 3.1bn for 1985. Among other things, the Bundespost attributes this to rising costs and restraint in postal and telecommunications charges.

It plans a further 5 per cent increase in investment to a record DM 12.1bn (including DM 13.2bn for telecommunications). Its mountain of debt will rise further. Net borrowing for the year is expected to be DM 6.5bn, lifting its total debt burden over the DM 60bn level.

The Bundespost is resolutely pressing on with plans to digitise its network, to integrate digital voice, data and video services and, among other things, to spread cable TV. The digitisation project, however, is not going as fast as some critics would like. Mr Heinz Nixdorf, the head of Nixdorf Computer, has been publicly urging the Bundespost to speed up digitisation.

Orders for digital public switching systems have gone to both Siemens and Standard Elektrik Lorenz (SEL), which is 86 per cent owned by IIT of the US. Both Siemens and IIT have been making major efforts to find other markets for their switching systems to offset the continuing high development costs.

Bonn has sustained orders for its EWSW switching system in more than 20 countries, including China. But a key element in its strategy is the US.



While Sweden has the world's highest rate of telephone penetration it also enjoys some of Europe's lowest telephone tariffs. Ericsson, with a turnover of SKr 29bn, is Scandinavia's leading producer of telecommunications equipment.

# New system begins to take shape

**Ireland's telecommunications network is undergoing a technological transformation, as Hugh Carnegie reports from Dublin.**

IRELAND'S telecom sector is in the middle of a massive restructuring and modernisation programme aimed at establishing one of the most advanced networks in the world. Until quite recently the image prevailed of an Irish operator laboriously welding jockeys in a small country telephone exchange.

That was the case at the end of the 1970s when two five-month long strikes by workers in the postal and telephone services brought the old-fashioned system to a virtual standstill. Not before time, it became clear to the government that the system may have suited the predominantly rural-based economy of the 1940s and 1950s but was hopelessly outdated and incapable of serving an increasingly industrial-based economy.

The government of the day set up a review board which recommended in 1979 that the postal and telecommunications services be split with the latter being taken out of the civil service. It also recommended a huge investment programme to modernise the telecommunications network.

The review group's report was given effect and an interim telecom board was set up to plan the restructuring of what is called a semi-state body: a wholly-owned state corporation which operates outside the civil service as a commercial enterprise.

The board, meanwhile, set about racking the creaking network with a programme of heavy investment. To date about £1bn (\$850m) has been spent, half of it borrowed overseas. In a bold technological leap, the board decided to install a digital system and the contracts went to LM Ericsson of Sweden and CIT Alcatel of France.

Digital switching has now been installed in 30 per cent of long-distance exchanges, 50 per cent of short distance junctions and 25 per cent of local exchanges.

While this technological transformation was under way, the final legislation for the establishment of a separate telecommunications company was enacted and Telecom Eireann was set up on January 1 1984.

Telecom Eireann, although wholly owned by the state, is run entirely independently and receives no government subsidy. It has assets of £1.5bn. Because of the investment programme, which has left it with interest charges alone of £130m a year, it showed a substantial loss in its first annual report last month covering its first 15 months of life.

A five-year corporate plan envisages borrowing and associated costs falling and a trimming of the workforce—TE is the biggest employer in Ireland—by 3,000-4,000 from the present 16,000.

With income currently at £450m, growth will have to be maintained at present rates of more than 5 per cent if the target of breaking even in the 1987-88 April-March financial year is to be met. Mr Fergus McGovern, the TE chief executive, is confident of this, adding that Ireland's penetration of 20 lines per 100 head of population is low by western standards.

TE has another burden which helped bring about the departure of Mr McGovern's predecessor, Mr Tom Byrne, who left TE in April this year. He objected to a government levy of £130m spread over three years.

Mr McGovern says the issue had now been settled to the satisfaction of both sides. TE would make "certain payments" to the exchequer over the same period, but this would not affect the profit and loss account, he said.

TE's monopoly position is secure as it has exclusive privilege over the internal network and is the only body licensed to operate the international network. Only the supply of modems, teleprinters and office FAXes have been deregulated.

# A bold policy for reform

**In the Netherlands there are ambitious plans to restructure the state telecommunications authority, as Laura Raum reports here.**

A LARGE, white plastic dome suddenly appeared last autumn along the broad and grassy avenue leading to Amsterdam's Rijksmuseum. This futuristic half-bubble is the Dutch PTT telecommunications authority's most ambitious effort yet to adapt from a sleepy, bureaucratic agency into a competitive, profit-oriented company.

Housing an exhibition called "Telecommunications seen close up," the roving roadshow acquaints visitors with all the latest gadgets the PTT has to offer—from exotic telephones to high-tech interactive videotex. The subtle message is that the PTT has lots of fancy business to sell locally, but perhaps unknown products and services for which the consumer may have to pay more one of these days.

The impetus behind the PTT's glossy display is the Government's plan to spin off the PTT in three years into a limited liability company (NV), whose shares would be held entirely by the state. Two subsidiaries would be created for postal and telecommunications services, with the former retaining a monopoly and the latter losing its monopoly in advanced communications.

The long-discussed plan stops short of British Telecom's privatisation in that the PTT shares would remain in the Government's hands instead of being sold to the public. But the telecommunications subsidiary would be up against fierce competition for peripheral equipment such as PABXs, videotex, message-switching systems and value-added networks.

The incorporation plan, which would take effect January 1 1989, seems virtually certain of going through because of the decade already spent in carefully housing its Dutch PTT's history of open procurement from the PTT authority, unions and Parliament.

The proposals still leave

open exactly where the lines will be drawn between Government-controlled products and services and those completely open to private competition. It is not clear for example whether analogue private automated business exchanges will remain under the NV PTT's monopoly while digital PABXs will be free market; and it is far from certain that the NV PTT will want to compete with the PTT already doing and already has a good head start on the PTT's V08110 Philips recently received a £1.1bn contract from the Societa Internationale Aero-nautiche, a global airline-booking system, for 15 Sophomation Lams and the order could escalate to £1.6m.

A market that promises to be a free-for-all no matter who is involved is that for PABXs. The demand for PABXs can be expected to burgeon in coming years as only nine systems were in place in the Netherlands last year, according to the Steenbergen Com-

mission, a Government-appointed panel whose recommendations on the PTT's future generally were accepted by the Hague.

The Steenbergen Commission found that Holland had only half as many PABXs as neighbouring West Germany because of excessively high costs resulting from only two suppliers, one of which is Philips. Greater competition could be expected to slash the costs to affordable levels.

The Commission released its year-long study last July, recommending that the PTT be split into three subsidiaries for postal services, public telephone and advanced communications.

While the Cabinet accepted most of the Commission's recommendations, it chose instead to keep all the telecommunications activities together in one subsidiary, contending that the current geographical diversification programme would make such a division too difficult.

# Joint satellite plan by Nordic nations

**THE GOVERNMENTS** of Sweden, Norway, Finland and Iceland have agreed on the final details of an SKr 1.5bn Nordic television and telecommunications satellite, Tele X.

The four public broadcasting administrations are to jointly administer two television channels editing their individual programming into an all-Nordic format.

The project initially had industrial development motivations, but is now also seen as a way to counter the commercial and what are seen as cultural threats posed by privately owned cable and satellite stations.

In fact, the public sector monopoly over television broadcasting has already been broken throughout the Nordic region with the advent of Sky Channel, Music Box and Screen Sport and a number of new private projects in the pipeline.

"The new satellite and cable technology has undercut the state monopolies," says one analyst. "Everyone recognises it will be impossible to maintain."

What we're now seeing is a mad scramble of companies trying to cut themselves a piece of the action.

Indeed, the new technology has also cut away the traditional boundaries between the public telecommunications agency on the one hand and the broadcasting monopoly on the other.

In Sweden, the Televerket (public telecommunications agency) is moving heavily into the broadcasting field, with a major investment in cable installations, concentrating on large housing complexes in the large cities of Stockholm and Gothenburg.

Moreover, it has booked space on Eutelsat 4 with the intention of distributing a commercial TV service, giving rise to the curious situation in

**In the Nordic region, satellite and cable technologies are undercutting state monopolies, reports David Brown in Stockholm.**

Socialist Sweden of competing state-run agencies.

A number of private firms in Sweden have come on the market with parabolic receiving antennas aimed at customers in outlying regions. With the price of these receivers continually dropping, this is seen as a potentially lucrative field in a sprawling country which stretches nearly 1,000 miles from north to south.

"If the expectations we now have are realised," says a Televerket expert, "there'll be room for most of us in this market."

In Sweden, Televerket's monopoly over data and telephone communications still appears virtually impregnable. However, there are potential shifts on the horizon. Comvik Skyport, owned jointly by the Kinnevik investment group and Comvik, the mobile telephone service supplier, has announced plans to offer business customers long-line satellite connections with the US. The plan depends on Televerket approval, however.

Sweden has the world's biggest telephone penetration combined with among Europe's lowest tariffs and has been on the cutting edge in the development of new equipment and services.

The LM Ericsson group was one of the first to market an all-digital public switching system—the AXE—which has been sold to over 60 countries with a total of some 10m subscriber lines installed or on order.

With annual sales of SKr 29bn, Ericsson is Scan-

dinavia's leading telecommunications producer, and it holds some 15 per cent of the world telephone exchange market helped by the introduction of its AXE system.

However, its entry into the information systems market has proved to be costly and troubled. After running up heavy losses for the past two years, the group has been forced to drastically restructure its operations and shake up its top management.

Much of Sweden's research and development of telecom equipment including the AXE has been centred at Elelmetel Ulvevikings AR, jointly owned by Ericsson and Televerket.

Equipment developed at the subsidiary is manufactured by the PTT's industrial services division, Teli, for use at home. Ericsson produces the same equipment for sale abroad. Only a small proportion of Televerket's needs are met by foreign suppliers.

Meanwhile, the Nordic region has the largest and fastest growing mobile telephone network in the world, topping the 100,000 subscriber mark.

In Norway, the domestic telecommunications industry, largely dominated by foreign owners such as Siemens and IIT, have been hit by a downturn in the traditional home market, and companies are trying to find new markets abroad.

Among Norwegian companies are specialised communications equipment for the shipping and offshore market, and intercom systems where it holds a major world market share.

In Finland, the state-owned PTT's monopoly extends largely to international and long-distance service, while regional service is mainly the province of private telephone companies.

The industry leader is the Nokia telecommunications and electronics group, with annual sales of Fmk 9.5bn.

# Big merger announced

**CHANGES ARE** now coming at an accelerating pace in Italian telecommunications. The most important recent development is the announcement of a gradual merger between the country's two indigenous telecommunications manufacturing companies, Italtel and Telettra.

Part of the reason for this merger are the growing doubts about the future of the consortium that produces the Italian national public switching company.

Other important developments include the sale to the private sector of a large slice of SIP, the main telecommunications utility, and final preparations of the long-awaited parliamentary bill that will rationalise the structure of the public telecommunications system. Decisions are also being taken on the development of Italy's data transmission networks.

Late in November, Stet, the telecommunications holding company of the state-owned IRI group, agreed with Fiat, the country's biggest private sector concern, to set up a joint company. Into this joint company will gradually be transferred shares in Stet's subsidiary, Italtel and in Fiat's subsidiary Telettra. Each parent will own 48 per cent of the new company, with the balance being held by Mediobanca, the Milan merchant bank.

The initial aim is to create a single Italian telecommunications industry company. Italtel is Italy's major producer of public switching equipment, with group sales last year of £1.19bn. It leads the consortium which includes GTE of the US and Telettra, which produces the UT public switching system.

Telettra is a junior partner in that consortium. Its principal

**Italy is witnessing an accelerating rate of change in the telecommunications sector, as James Baxton reports from Rome.**

activity is in digital transmission, and, unlike Italtel, the bulk of whose sales are in Italy, Telettra exports about two-thirds of its turnover, which in 1984 amounted to £412m.

It may well be that not all the shares in each manufacturing company—especially those of Italtel—will be conferred on the new company. Much remains to be settled about who will run it and how. But the merger will create a rather stronger Italian base from which to negotiate in the whirlwind that is sweeping the European telecommunications industry.

The European manufacturers of public switching equipment are finally realising that too many companies are investing too much money in different, virtually incompatible switching systems, causing serious waste of resources and the possibility of big losses in the future. But for the Italian national consortium, the problems are if anything more pressing.

This is because GTE, which makes the larger version of the UT exchange system, is negotiating with Siemens of West Germany a deal which is expected to lead to the West German company taking over GTE's manufacturing operations in Europe and, in particular, Italy.

It is reckoned that after 1990, when the current agreement between GTE, Italtel and

Telettra expires, Siemens may have little interest in continuing with what would be a rival switching system to its own, while Italy is unlikely to want to introduce into the country the Siemens switching system, since this would bring to four the number of systems operating in the country—making it difficult for the Ericsson and IIT systems which are also manufactured in Italy.

As a result, Stet is extremely interested in the talks now going on between itself, and the French and British switching equipment makers on reaching some kind of agreement to rationalise their next range of products and give them all a chance of surviving. The alternative would be individual agreements between the companies (so what Mr Giuliano Grassi, managing director of Stet, calls "the left bank of the Rhine") with the major European producers—Siemens and Ericsson.

If the future of telecommunications manufacturing in Italy is once again uncertain, the future of telecommunications services is becoming clearer. For many years it has been recognised by almost everyone that the structure of the system was grossly inefficient and impractical. Telephone traffic between cities, as well as calls between Italy and other European countries are handled by ASST, an offshoot of the Ministry of Posts. The same ministry also handles telex and telegrams.

The rest of the domestic telephone network is in the hands of SIP, a subsidiary of Stet, while inter-continental telecommunications traffic is handled by Italcable, another offshoot of Stet.

# First Class Transatlantic Connections from a World Class Carrier

FTCC McDonnell Douglas - International Telecommunications

Looking for Transatlantic links? We'll meet you half-way... FTCC collaborates with British Telecom International and Mercury Communications to give you a complete communications service between Britain and the United States.

**Text-Voice-Data**  
Telex, voice or high speed data. FTCC will find the right way. At the right price. With over 100 years' experience on both sides of the Atlantic, we have an international reputation for quality and efficiency.

**Low Cost-High Speed**  
You can make substantial savings on your Transatlantic communications bills, using

the new high speed, low cost IBS digital services. These satellite services let you communicate at speeds up to two million bits per second. In conjunction with either Mercury or British Telecom we offer an entire range of new digital services, including voice, data, facsimile and video-conferencing.

**FTCC Has The Answer**  
If your company has business in the United States, you should be talking business with FTCC. Call Brian Ingledew or Kerry Manning on 01-377 0964, or write to us at: FTCC Communications (UK) Ltd, 13/19 Curtain Road, London EC2A 3LT.





## Communications 8

● Telecommunication supplier industries are struggling to adapt to radical change. Loss of captive markets due to deregulation, the soaring costs of new product development are forcing manufacturers to seek out new markets worldwide. Europe is more vulnerable to these upheavals in the communications industry than either the US or Japan.

## Research and development

● Figures for R and D cost of digital switching systems (\$bn)

System	1985	1986	1987
System 12 (ITT)	1.0	1.0	1.0
ASX (Ericsson)	0.5	0.5	0.5
ELI and ELI (CEC)	0.5	0.5	0.5
Alcatel	1.0	1.0	1.0
DNB (Northern Telecom)	0.7	0.7	0.7
System X (GEC)	1.4	1.4	1.4
Flasby/ST	1.4	1.4	1.4
ESS-5 (Western Electric)	0.75	0.75	0.75
EWSD (Siemens)	0.7	0.7	0.7

Source: Europe and the New Technologies

## World's top ten telecommunication equipment manufacturers

Rank	Company	Headquarters	1985 Telecom equipment sales (\$bn)
1	AT & T Technologies	US	11.16
2	ITT	US	4.98
3	Siemens	W Germany	4.48
4	L. M. Ericsson	Sweden	3.16
5	Alcatel-Thomson	France	2.74
6	Northern Telecom	Canada	2.68
7	NEC	Japan	2.41
8	GTE	US	2.38
9	Motorola	US	2.31
10	IBM*	US	1.73

## Markets for telecommunications equipment

Region	Projections \$bn (1979 prices)			Growth rates (%)
	1982	1987	1992	
North America	18.9	28.1	41.9	7.5
Europe	12.5	17.2	23.7	6.7
Asia	11.8	19.1	27.7	10.1
Latin America	1.4	2.0	2.9	7.7
Freeasia	1.2	1.5	2.0	7.2
Africa	0.4	0.7	1.0	8.2
Total (\$ billion)	46.8	68.2	102.7	8.1

Source: Arthur D. Little

## Rising demand for mobile systems

WHEN THE two competing mobile telephone networks using cellular radio started service this time last year they professed a confidence in the market which was not shared by everyone. Even though cellular radio telephones had done very well in the Nordic countries as well as in some US cities, there were considerable doubts as to whether the two British operators could attract the 25,000 to 30,000 subscribers they were confidently predicting by the end of the first year.

As it turns out they were indeed wrong—they were over-optimistic. By the beginning of December it is estimated there are more than 40,000 mobile telephones in the UK and in spite of some potential problems there is a growing optimism that both will continue to grow rapidly next year.

Several clear trends have emerged during the first year of operations including:

- Cellnet, the network operator jointly owned by British Telecom and Securicor, has held a 60 per cent share of the market since the services were started last January.
- By far the largest concentration of sales have been in London and the South-East. While this is partly a result of the service being available in these areas first, there is little doubt they will continue to be the main markets.
- The rest of the country is where the salesmen earn their money," says Colin Tipping, head of retail at British Telecom's Mobile Phone Division. Dealers in the North-East, for example, have a tough job, he adds.
- As a result of the concentration in London there are already signs of capacity problems. Both Cellnet and Vodafone, owned by Racal, have had to bring forward the introduction of new cells in London.

Both companies are thought to be keen to get their hands on the 400 channels which are being reserved for a pan-European cellular system. If they were able to persuade the government to allocate these frequencies, then the two would have a total of 1,000 channels.

● The top six accredited retailers have probably got 90 per cent of the market. It means that more than 20 other retailers are trying to survive on a precious little business and a shake-out looks inevitable.

● Subscribers are using their telephones more than expected (adding to capacity problems) (adding to capacity problems at peak times) although this may drop when they see the bill.

● The market for mobile communications is likely to grow rapidly next year, reports **Jason Crisp**

● Initial customers have tended to be "small" business, professionals and individuals and senior management in large companies. The industry is now pushing for large orders from the bigger companies.

● As expected equipment prices have been falling, particularly for hand-held sets. Some retailers have been suggesting equipment sales are not as price sensitive as first thought.

● The 10,000 or more jobs which the government predicted would be created by cellular radio have, to few observers' surprise, failed to materialise. Manufacturing of any cellular equipment in the UK is still very modest.

Racal has started making mobile equipment under licence to the user) are likely to play a growing part of the marketing effort.

portable, marketed by Ericell, is also made in the UK by Technophone but is not being sold in large numbers.

However, there is little doubt that the first year has been unexpectedly good for the network operators and some of the retailers. Heavy promotion, pent-up demand and the natural interest in something new ensured that there was a heavy demand for cellular radio telephones. Inevitably, this year will be harder and will require a stronger selling effort.

This will probably hit the smaller dealers harder. The industry has already become remarkably layered. Cellnet and Vodafone each have a large number of accredited retailers which in turn usually have dealers which may also have sub-dealerships. As a result, the margins have to be sliced up a number of times.

The accredited retailers receive their income from a proportion of the connection fee, and call traffic of their customers as well as from equipment sales. It means that those which are more successful benefit from the rising revenues "at" relatively small cost. They also benefit from the volume discounts from the networks.

It means that those which are successful—such as Racal's Vodac, BT's Mobile Phone Division and the Carphone Company—have an inherent growing advantage over those which have been slower to establish themselves.

As competition becomes tougher, the competitors are likely to make greater efforts to differentiate themselves from each other, other than through price. Added facilities such as answering and secretarial services and data communications (still a difficult area with doubts over its attractiveness to the user) are likely to play a growing part of the marketing effort.

Defensive rationalisation moves have already taken place in digital public exchanges. With about 10 suppliers in the market, Europe has vastly more capacity than it—or the rest of the world—needs. A shake-out is inevitable and has already begun.

The biggest problem area is in France, Italy and Britain. A race is on among European companies to seek strong international partners. In the past three years, both Philips of the Netherlands and Italy's Olivetti have linked up with AT&T and France's Cit Alcatel wanted to do the same. BT wanted to join forces with IBM but was blocked by the British Government.

But the removal of excess capacity and the forming of international ties are only partial measures. Europe's industry cannot hope to compete effectively with its national markets remain fragmented by discriminatory procurement practices, incompatible technical standards and widely differing—and often opaque—equipment approval procedures.

Dr Henry Ergas, a telecommunications economist with the Organisation for Economic Co-operation and Development, has estimated that this patchwork of national barriers means that the costs of introducing a product throughout Europe can be up to 100 times higher than in the US.

The irony about these impediments is that they are only a mild deterrent to large US companies: ITT has telecommunications divisions in more European countries than almost any of its European competitors. But Europe's market barriers are devastating handicaps for its own companies, and particularly for smaller, entrepreneurial ventures.

Clearing away these obstacles would give suppliers a chance to breathe. It would also benefit another interest group: the telecommunications industry's customers, who have long lived in the shadow of the monopoly system but are now beginning to assert the freedom of choice which increased competition offers.

## Japan's new NTT sustains momentum

AFTER YEARS of deliberations, Nippon Telephone and Telegraph (NTT) was finally restructured as a private company in April this year, amid a blaze of publicity; a move which has been of profound interest to players in both the domestic and overseas telecommunications markets.

For domestic firms the question remains as to whether the change in NTT's status will lead to real opportunities at a time of rapid expansion and diversification in the telecommunications market, or whether domination will continue in effect but under a different name.

For overseas telecoms suppliers the liberalisation of the telecoms market as a whole, with the NTT privatisation as its by-product, has rightly or wrongly, come to be viewed as a critical indicator of Japan's resolve to do something about trade friction in general, a problem which is currently in an acute stage.

From the domestic standpoint, makers have been somewhat taken aback by the aggressive and businesslike approach adopted by the new NTT, which has moved quickly to secure new links with foreign firms including IBM and AT&T, in addition to launching bold initiatives for expanded telecoms services in the home market.

Overseas industry representatives, notably leaders of the US Electronics Industries Association, initially expressed satisfaction that a freer market is developing, symbolised by progress achieved in the first round of telecoms market-opening talks.

In recent weeks however, Japan has again come under

attack, this time for allegedly showing a lack of readiness to introduce changes in the field of radio wave legislation, and in the short-term, at least it seems likely that the telecoms market will remain a potential flash point in the war of words between Japan and the US.

Even before privatisation, NTT was busy preparing itself for the challenges of the open market. In 1983 the corporation was swamped with enthusiastic applicants for the trials of its "Advanced Information Network System" (ANS), which involved the use of leased terminal equipment including digital telephones, digital facsimile receiver/transmitters and TV conference devices.

In late 1984 NTT applied to the Government for approval of new high-speed digital data transmission and satellite communications services offering line speeds up to 600 times faster than those then available, and promised that with the new services it was planning it would be able to satisfy all types of customer need in electronic communications, including such services as colour facsimile transmissions, teleconferencing and newspaper transmission.

This year the momentum has been sustained by a series of announcements concerning joint business activities. In August NTT signed an agreement to set up with 13 Japanese trading houses and engineering firms which involved the setting-up of a new company designed to

capture an annual ¥50bn share of the international market for data communications networks, particularly in developing countries.

NTT was encouraged in the venture by recent business deals which have included the re-networking of the government computers in the nation of Brunei and an order from China for the reconstruction of optical fibre transmission lines near Beijing.

Operating under the name "NTT International" the new firm, capitalised at ¥2bn, brings together several of Japan's top trading houses — including Sumitomo and Mitsu, and three engineering firms: JGC, Chiyoda Chemical Engineering and Construction, and Toyo Engineering Corporation. Telecommunications manufacturers were excluded from the partnership.

NTT owns 50 per cent of the new firm and NTT executive vice president Koji Masuda will assume the presidency. NTT aims to do ¥20-30bn worth of business in the first year and ¥50bn within three years. The deal brought to eight the number of joint ventures or new subsidiaries in the data commu-

nications field. In September this year, however, the biggest developments came with the announcement of a two-year co-operation agreement with AT&T and a joint venture with IBM.

The AT&T agreement is designed to promote mutual exchanges of senior personnel with a view to the eventual formation of joint telecoms ventures. The deal serves to strengthen already close relations between the two leading telecoms organisations, who have already undertaken exchanges of patented technologies and of research personnel.

AT&T is expected to press for detailed information of the NTT "ANS" project, while NTT in turn is interested in AT&T's strategies to cope with its competitors in the newly liberalised US telecoms market.

While Japanese telecommunications companies and computer makers seemed little concerned by the AT&T link, they have reacted with open alarm to NTT's plans to enter into a joint venture with IBM Japan, a deal which calls for wide-ranging co-operation in fields which include VANS, international telecoms services, computer software and sales of IBM computers.

On hearing of the plan, some leaders of the Communication Industry Association of Japan (CIAJ), which represents the nation's key electronics business firms, proposed the immediate filing of a petition with the Posts and Telecommunications Ministry to prevent the move, but following discussions between NTT's president Hisashi Shinto and Takuma Yamamoto, the head of the CIAJ, the organisation

decided that it would not, after all, oppose the tie-up.

The CIAJ said it had made its decision in the interests of avoiding further aggravation of US-Japan trade tensions. There appears to be a wide consensus among Japan's data processing and communications firms that the IBM/NTT deal could have a monopolistic effect upon these markets, but NTT's Shinto has strongly rebutted these complaints, saying it is wrong for other companies to criticise the proposed partnership before the start of any "full-fledged business".

Speaking at a recent Press conference, Shinto shrugged off the protests, saying that "if we could achieve a level of growth that would give the Fair Trade Commission something to worry about, that would be a success".

In the NTT annual report, the company's R & D spending was said to have increased by 35 per cent in the 1984 business year over the previous year's level. Shinto said that the top priority in future R & D would be software development to facilitate the design of advanced electronic systems.

Concerning recent reports that NTT is planning the large-scale purchase of digital switching systems from firms that include AT&T, Shinto said that the technical portion of related negotiations have been completed and that "overall evaluation" is now under way with prices the central issue.

NTT's efforts to diversify its activities in the home market show every sign of continuing apace. The company's first year a total of 16 new subsidiaries and affiliates had been established specifically with the aim of developing fresh fields of business.

## Privatisation in Japan: the restructured Nippon Telephone and Telegraph company has moved quickly to secure new links with foreign manufacturers, as Roy Garner reports from Tokyo.

Sumitomo and Mitsu, and three engineering firms: JGC, Chiyoda Chemical Engineering and Construction, and Toyo Engineering Corporation. Telecommunications manufacturers were excluded from the partnership.

NTT owns 50 per cent of the new firm and NTT executive vice president Koji Masuda will assume the presidency. NTT aims to do ¥20-30bn worth of business in the first year and ¥50bn within three years. The deal brought to eight the number of joint ventures or new subsidiaries in the data commu-

nications field. In September this year, however, the biggest developments came with the announcement of a two-year co-operation agreement with AT&T and a joint venture with IBM.

The AT&T agreement is designed to promote mutual exchanges of senior personnel with a view to the eventual formation of joint telecoms ventures. The deal serves to strengthen already close relations between the two leading telecoms organisations, who have already undertaken exchanges of patented technologies and of research personnel.

AT&T is expected to press for detailed information of the NTT "ANS" project, while NTT in turn is interested in AT&T's strategies to cope with its competitors in the newly liberalised US telecoms market.

While Japanese telecommunications companies and computer makers seemed little concerned by the AT&T link, they have reacted with open alarm to NTT's plans to enter into a joint venture with IBM Japan, a deal which calls for wide-ranging co-operation in fields which include VANS, international telecoms services, computer software and sales of IBM computers.

On hearing of the plan, some leaders of the Communication Industry Association of Japan (CIAJ), which represents the nation's key electronics business firms, proposed the immediate filing of a petition with the Posts and Telecommunications Ministry to prevent the move, but following discussions between NTT's president Hisashi Shinto and Takuma Yamamoto, the head of the CIAJ, the organisation

decided that it would not, after all, oppose the tie-up.

The CIAJ said it had made its decision in the interests of avoiding further aggravation of US-Japan trade tensions. There appears to be a wide consensus among Japan's data processing and communications firms that the IBM/NTT deal could have a monopolistic effect upon these markets, but NTT's Shinto has strongly rebutted these complaints, saying it is wrong for other companies to criticise the proposed partnership before the start of any "full-fledged business".

Speaking at a recent Press conference, Shinto shrugged off the protests, saying that "if we could achieve a level of growth that would give the Fair Trade Commission something to worry about, that would be a success".

In the NTT annual report, the company's R & D spending was said to have increased by 35 per cent in the 1984 business year over the previous year's level. Shinto said that the top priority in future R & D would be software development to facilitate the design of advanced electronic systems.

Concerning recent reports that NTT is planning the large-scale purchase of digital switching systems from firms that include AT&T, Shinto said that the technical portion of related negotiations have been completed and that "overall evaluation" is now under way with prices the central issue.

NTT's efforts to diversify its activities in the home market show every sign of continuing apace. The company's first year a total of 16 new subsidiaries and affiliates had been established specifically with the aim of developing fresh fields of business.

NTT's efforts to diversify its activities in the home market show every sign of continuing apace. The company's first year a total of 16 new subsidiaries and affiliates had been established specifically with the aim of developing fresh fields of business.

NTT's efforts to diversify its activities in the home market show every sign of continuing apace. The company's first year a total of 16 new subsidiaries and affiliates had been established specifically with the aim of developing fresh fields of business.

NTT's efforts to diversify its activities in the home market show every sign of continuing apace. The company's first year a total of 16 new subsidiaries and affiliates had been established specifically with the aim of developing fresh fields of business.

## More foreign groups enter the arena

BUSINESS ACTIVITY in Japan's telecommunications market has probably never been more intense than it is at present. Telecom equipment manufacturers, both domestic and foreign, appear to have made a rapid adjustment to the post-NTT privatisation business scene, the framework of which is provided by the revised Telecommunications Business Law.

The new legislation provides two categories of carriers: Type 1 carriers, which are their own telecoms circuit facilities and provide services to customers and Type 2 carriers which lease telecoms circuits from Type 1 carriers to provide services.

Three principal providers of the Type 1 services emerged in April 1985, each planning to offer telephone and leased circuit services in the Tokyo-Osaka area beginning in late 1986 or early 1987.

The best-known is Daini-Denden, (literally "second NTT") which has the largest group as its major shareholder. The other two companies are Japan Telecom, 36 per cent of which is owned by Japan National Railways (JNR), and Telecity Japan, 50 per cent of which is owned by Toyota Motor Corp (6 per cent). All companies have a paid-up capital of around ¥2bn.

Daini-Denden is to use microwave radio to provide its 5,750 circuits, while the other firms will use fibre-optic cables to offer a comparable number of lines.

The other Type 1 common carriers are satellite communications firms: the Japan Communications Satellite Co (JCS) owned 40 per cent and 30 per cent respectively by the major trading groups C. Itoh and Mitsu, and the Space Communications Corp (SCC), owned 75 per cent-25 per cent by Mitsubishi and Mitsubishi Electric.

Both satellite companies plan to offer a nationwide leased circuit service starting early in 1988 using satellites made by Hughes of the US (JCS) and Ford/Mitsubishi (SCC). One other company, Satellite Japan, has also recently been announced, with Sony as the major shareholder.

The fees which Type 1 carriers can charge will be subject to the approval of the Ministry of Post and Telecommunications. Type 2 service providers will face fewer restrictions.

Type 2 firms are sub-classified into "Special Type 2" and "General Type 2" carriers, and in these fields the market is likely to be highly competitive. Special Type 2 carriers are those which provide large-scale switching and packet switching networks to unspecified mass

customers or provide international telecom services, and these must be registered with the MPT and -fees notified. General Type 2 carriers are provided freedom from ministerial control beyond the requirement to make formal notification of their intended business.

Seven companies, including Intec, Fujitsu, NEC, and Hitachi have registered as special VAN providers and over 170 companies have registered for, or plan to offer, general VAN services. Foreign-owned companies face no restrictions as Type 2 carriers, but a limit of one-third foreign ownership is applied in the Type 1 area.

The actual Type 2 services offered to users by new entrants in the market can be exemplified by Fujitsu. In the "special" field it will offer message switching and packet switching services, while in the "general"

area it will offer leased line services, data and video, telephone exchange services, voice-mail, facsimile mail, packet switching services and TV teleconferencing.

Some of these services commenced in October 1985. Fujitsu estimates that the VAN market is worth around ¥300bn, and predicts a value of ¥80bn by 1990, with 30 per cent held by NTT rivals.

In 1984, NTT's revenue from leased line services totalled US\$456.5m, from data transmission US\$1,240.4m while NTT telecomm's R & D expenditures in the same year were valued at \$850.4m.

One of the first foreign firms to find success in the Japanese telecom market was Rolm of the US (now taken over by IBM Japan) which succeeded in being the first company, either foreign or Japanese, to win "type approval" for FXS (computerised switchboard) systems.

More recently new entrants have included GTE Telnet of the US, which has joined up with Intec and Sony to form a joint multi-national electronic messaging service, and General Electric of the US, which has tied up for international VAN, and other telecommunications with Japan's NEC.

Progress for foreign companies is sure to take time however, frustrated by lack of experience in the Japan market. Even Rolm, after its first two years of efforts, only actually sold \$3m worth of systems, and expects \$30m of FXS sales by 1986, a palfry sum by international standards.

It is also too early to estimate the true potential size of the market. As recently as July 1984, the Chairman of Keidanren (Federation of Economic Organisations) warned that no more than one new telecom company would be necessary to supplement NTT, and his call for unified telecoms projects by competing companies, to avoid excess competition, was supported by the MPT minister Keiwa Okuda.

There is also uncertainty about user-response. NTT, for example, has faced unexpected problems in the introduction of its new "home" services in Japan. The conference call facility, which is being tested in eight cities, is being tied up by junior and high school students who are making use of it as a "free" conference calls per day — sometimes skipping school for the purpose — and its mobile phone service is being criticised by business users who complain that it is too easy for outsiders to tap into the calls made from vehicles.

Progress for foreign companies is sure to take time however, frustrated by lack of experience in the Japan market. Even Rolm, after its first two years of efforts, only actually sold \$3m worth of systems, and expects \$30m of FXS sales by 1986, a palfry sum by international standards.

It is also too early to estimate the true potential size of the market. As recently as July 1984, the Chairman of Keidanren (Federation of Economic Organisations) warned that no more than one new telecom company would be necessary to supplement NTT, and his call for unified telecoms projects by competing companies, to avoid excess competition, was supported by the MPT minister Keiwa Okuda.

## Era of massive upheavals

CONTINUED FROM PAGE 1

tion scale needed to absorb development costs.

Though Europe has long prided itself on being strong in telecommunications, it is increasingly being thrust onto the defensive. On a per capita basis,

its investment in telecommunications equipment is barely a third of the US level, it lags the US in advanced services and its collective trade balance in telecommunications with the US and Japan is deteriorating fast.

The biggest problem area is

in digital public exchanges. With about 10 suppliers in the market, Europe has vastly more capacity than it—or the rest of the world—needs. A shake-out is inevitable and has already begun.

Defensive rationalisation moves have already taken place

in France, Italy and Britain. A race is on among European companies to seek strong international partners. In the past three years, both Philips of the Netherlands and Italy's Olivetti have linked up with AT&T and France's Cit Alcatel wanted to do the same. BT wanted to join forces with IBM but was blocked by the British Government.

But the removal of excess capacity and the forming of international ties are only partial measures. Europe's industry cannot hope to compete effectively with its national markets remain fragmented by discriminatory procurement practices, incompatible technical standards and widely differing—and often opaque—equipment approval procedures.

Dr Henry Ergas, a telecommunications economist with the Organisation for Economic Co-operation and Development, has estimated that this patchwork of national barriers means that the costs of introducing a product throughout Europe can be up to 100 times higher than in the US.

The irony about these impediments is that they are only a mild deterrent to large US companies: ITT has telecommunications divisions in more European countries than almost any of its European competitors. But Europe's market barriers are devastating handicaps for its own companies, and particularly for smaller, entrepreneurial ventures.

Clearing away these obstacles would give suppliers a chance to breathe. It would also benefit another interest group: the telecommunications industry's customers, who have long lived in the shadow of the monopoly system but are now beginning to assert the freedom of choice which increased competition offers.

## A major area of growth

BRITAIN, which has the largest potential market in Western Europe for value-added network services (VANS), is expected soon to make up its mind about this major growth area in telecommunications. VANS represent an area where such argument has been devoted to how they will be regulated as to what they will actually do.

The UK Government merely flattered an already-heated debate when it brought out a discussion document in June, outlining the new licensing regime. Its proposals immediately provoked criticism from every sector of the industry. Now it has abandoned its earlier thinking and is to put forward proposals in a new consultative document that appears to go a long way in meeting the earlier criticisms.

If the comments on the document are not to distract the proposals will soon go to the licence drafters.

The new licensing regime will provide a major boost to the development of VANS, an area that is already growing rapidly. Since the licensing regime in the UK started in 1981, the Department of Trade and Industry has licensed nearly 700 VANS. However, the real growth is now taking place. Many of these VANS existed before they were licensed, but they were not registered.

None the less, no one doubts that there will be real growth in Western Europe annual revenue in 1985 of about \$270m is forecast to increase by the market research firm, Frost and Sullivan) to \$5.7bn by 1990. More than half of this figure will go to private companies, the rest to the telecom administrators.

The major VANS countries will be the UK (\$1.4bn), West Germany (\$1.1bn) and France (\$1.1bn). In the UK, all VANS must operate across the networks

that belong to British Telecom (or Mercury). Usually they involve a company leasing a line from BT and sending messages over it to third parties. BT itself, however, is also a major VANS provider (and one whose dominance is feared by the rest of the industry).

The essential ingredient of a VANS is that the message or whether it is voice or data, must be enhanced by the service. Without that enhancement, the message would be a basic conveyance and, therefore, the

value-added network services are all set to become a major growth area, in Europe, the market could be worth \$5.7bn by 1990, with the main users being Britain, West Germany, and France, as Peter Elman reports

message of the two network providers were restricted to providing only services that added value to basic conveyance. But when the basic network area is opened up, there will probably be little need to license VANS.

It would, in fact, be increasingly difficult to police a licensing regime, even if the Department of Trade and Industry (DTI) or Office of Telecommunications were interested in doing so. For with digitalisation, it will be impossible to tell what is being sent down the line. Digitalisation will also allow the networks themselves to add value as part of their inherent function.

As Sir George Jefferson, the BT chairman, told a Financial Times conference, an increasing range of what are currently regarded as value-added services will prove to be naturally and more effectively provided as applications of the processing power and in-built intelligence of modern digital basic networks.

Even over the last few years,

it has not always been easy to draw a distinction between basic conveyance and VANS. That distinction has finally been blurred altogether by a new breed of service known as managed data network service (MDNS). This is, as the name implies, basically a service which manages the data that it sends around the network, providing the basis for more specific value-added services.

No one, and certainly not the DTI, had conceptualised the need for